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UNITED   STATES   OF   AMERICA   PATENT   APPLICATION

FOR:

APPARATUS, SYSTEM, AND METHOD FOR
AN ELECTRONIC PAYMENT SYSTEM

INVENTOR:

DAVID H. WALKER

Morgan & Finnegan, L.L.P.
345 Park Avenue
New York City, New York   10154-0053
United States of America
(212) 758-4800

Attorneys for Applicant

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FIELD

The present contrivance generally relates to computer systems and software, and more particularly to a method and system for making payments and obtaining credit.

5   ## BACKGROUND

INFORMATION TECHNOLOGY SYSTEMS

Typically, users (i.e., people or other systems) engage computers to facilitate information processing. A computer operating system enables and facilitates users to

10 access and operate computer information technology. Information technology systems provide interfaces that allow users to access and operate the various systems.

USER INTERFACE

Somewhat like how automobile operator interfaces

15 (e.g., steering wheels, gearshifts, speedometers, etc.) facilitate the access, operation, and display of automobile resources, functionality, and status; computer user interfaces similarly facilitate (e.g., via cursors, menus, windows, etc.) the access, operation, and display of computer hardware and

20 operating system resources, functionality, and status. Graphical user interfaces such as the Apple Macintosh

Operating System or Microsoft's Windows provide a baseline and means of accessing and displaying information. Such consumer-oriented operating systems enable users to access and operate computer information technology by providing an integrated

5 user interface. Other operating systems such as Unix do not provide integrated graphical user interfaces and instead allow various interfaces to be employed such as command line interfaces (e.g., C-shell) and graphical user interfaces (e.g., X windows).

10 WORLD WIDE WEB

The proliferation and expansion of computer systems, databases, the Internet, and particularly the World Wide Web (the web), have resulted in a vast and diverse collection of information. Various user interfaces that facilitate the

15 interaction of users with information technology systems (i.e., people using computers) are currently in use. Tim Berners-Lee originally developed an information navigation interface called WorldWideWeb.app, i.e., the web, in late 1990 on NeXT Computer Inc.'s operating system, NeXTSTEP, at the

20 European Organization for Nuclear Research (CERN, a particle physics center). Subsequently, information navigation

interfaces, i.e., web browsers, have become widely available on almost every computer operating system platform.

Generally, the web is the manifestation and result of a synergetic interoperation between user interfaces (e.g., web browsers), servers, distributed information, protocols, and specifications. Web browsers were designed to facilitate navigation and access to information, while information servers were designed to facilitate provision of information. Typically, web browsers and information servers are disposed in communication with one another through a communications network; i.e., information servers typically provide information to users employing web browsers for navigating and accessing information about the web. Microsoft's Internet Explorer and Netscape Navigator are examples of web browsers. In addition, navigation user interface devices such as WebTV have also been implemented to facilitate web navigation. Microsoft's Information Server and Apache are examples of information servers; i.e., their function is to serve information to users that typically access the information by way of web browsers.

HYPERTEXT

Information on the web typically is provided through and distributed employing a HyperText Markup Language (HTML) specification. HTML documents are also commonly referred to as web pages. HTML documents may contain links to other HTML

5   documents that can be traversed by users of web browsers (i.e., user interfaces) by selecting the links, which are commonly highlighted by color and underlining. HTML has been extended and upgraded resulting in new standards such as Extensible Markup Language (XML) and other such variants,

10   which provide greater functionality. HTML's progenitors were Standardized General Markup Language (SGML), which in turn was preceded by the General Markup Language (GML). SGML is generally regarded as a more functional superset of HTML and first appeared in 1980 as a draft by the Graphic

15   Communications Association (GCA) to the American National Standards Institute (ANSI) (GCA 101-1983); it was adopted as an international standard by the International Standards Organization (ISO) in 1986 (ISO 8879:1986). Charles Goldfarb, Edward Mosher, and Raymond Lorie invented the GML at IBM to

20   facilitate law office information system integration and improve document processing. GML itself was inspired by William Tunnicliffe, chairman of the CGA, during a

presentation on the topic of "the separation of the

information content of documents from their format" at the

Canadian Printing Office in September, 1967.

HTML documents typically are accessed through

5   navigation devices via a HyperText Transfer Protocol (HTTP).

HTTP is a stateless application-level protocol for

distributed, collaborative, hypermedia information systems,

and is further described at the World Wide Web Consortium

organization (W3C) web site entitled HTTP Specifications and

10   Drafts (available at www.w3.org/Protocols/Specs.html).

Microsoft's Information Server allows the tracking of a state

with a built-in session object.

The basic web browsing paradigm presents users with

a scrolling page full of text, pictures, and various other

15   forms of information media such as movies and links to other

documents. Web browsers allow users to access uniquely

identified HTML documents on the web by entering a navigation

location in a Universal Resource Locator (URL) and employing

HTTP as a transfer protocol to provide and obtain web pages.

20   Typically, a user provides the address of a desired HTML

document into a URL (either directly or through the selection

of links in an already viewed HTML document).

PAYMENT SYSTEMS

There has been a tremendous increase in transactions occurring through communications networks such as the Internet. This increase in transactions has coincided with an

5 increase in the use of electronic payment systems.

Historically, payments were enabled by a double coincidence of wants; i.e., barter for goods and or services. Thereafter, physical commodities such as silver, gold, etc. were affected as a medium to enable transaction where no

10 double coincidence of wants existed. Thereafter, commodity backed currency, and thereafter fiat money (i.e., non commodity backed currency) became the medium of ad hoc payment systems throughout the world.

Later, bank notes came into existence that allowed

15 people to employ their own medium facilitating a transfer of funds from one person's bank account into another; a clearing process employed by participating banks established the validity of the notes, and enabled the release and transfer of funds. These notes (and analogue giros) would be brought to a

20 clearing house where banks would meet to exchange the notes and enable the transfer of funds.

Eventually, this cumbersome physical meeting process was automated into automated clearing house payments. These automated clearing house systems required the transfer of tapes and or the like, and have eventually been effectuated over communications networks. The automated clearing house systems required participants to adopt rigid open standards such as the electronic data interchange (EDI) community standard, but still worked similarly to their centralized clearing house analogues of yore.

As transaction needs increased, new payment methods were developed. Significantly, payment cards first were developed around 1915 and were employed by a small number of U.S. hotels and department stores. In 1947, the Flatbush National Bank began offering cards to customers, which was soon followed by the Diners Club card in 1950.

Since then, many card companies have come into existence, and were made available employing two major payment system methods: closed and open loop payment processes.

Cards such as American Express, Discover, and Diners Club employ a closed loop system. A closed loop system is one where all transaction data is captured within the system and employs a single owner that has contracts with all cardholders

and merchants employing the system. The single owner

authorizes and settles all transactions. The single owner

also obtains a fee, typically from the merchant, for enabling

the transaction.

5   Alternatively, cards such as Visa and MasterCard

employ an open loop system. An open loop system is one where

a joint venture of participants enables a transaction.

A cardholder may obtain a credit card from any

number of issuers (typically banks). Similarly, merchants who

10 wish to accept business from cardholders and, thus, must find

a sponsoring bank that participates in the joint venture.

When a cardholder engages in a transaction with a merchant,

the transaction is facilitated through the joint venture's

centralized authorization and settlement system.

15 The open loop payment system provides the details of

the transaction to the issuer and executes the transfer of

charges between the issuer and sponsor. Each issuer sets its

own fees for enabling such transactions, typically, the brunt

transaction charge being born upon the merchants. Also, the

20 joint venture payment system sets a price, i.e., an

interchange fee, that determines how the issuer and sponsor

split the fees for a transaction in which both are

participating. Further, the joint venture takes a typically

smaller charge per transaction from issuers and sponsors for

use of the system. All of these costs are ultimately born on

participating merchants that typically must offer up anywhere

5   from 3-7% of the transaction value for enabling the

transaction.

Such transaction information is typically maintained

by the owners of either closed or open loop systems. The

transaction information also is passed to credit rating

10   companies that track usage of individuals.

Furthermore, many cryptographic techniques exist to

secure digital information. Conventionally, encoding and

decoding methods are employed to render information either

securely unreadable (i.e., encoded or encrypted) and

15   conversely readable (i.e., decoded or decrypted). Typically,

encryption methods such as the data encryption standard (DES)

and or pretty good privacy (PGP) allow for the scrambling of

information into a form that is unreadable to anyone not in

possession of a proper means of for decryption. Many

20   conventional cryptographic methods employ codes that are used

to both encode and decode information. Such codes are

conventionally called keys.

SUMMARY

As set forth below, a need exists for an improved apparatus, system, and method for an electronic payment system. The present system uniquely blends properties of both open and closed loop payment systems. Furthermore, the present system provides a unique way to reduce the transaction cost burden placed upon merchants employing a payment system with the provision of advertisements. Furthermore, the present system provides a way to track the transactional usage of those engaged in transactions and the like without exposing identifying information.

Also, the present system is an apparatus, comprising a memory having at least one region for storing executable program code, and a processor for executing the program code stored in the memory. The program code, further comprises code to affect provision of a credit request, code to affect provision of accesser determined information, code to affect provision of bids for accesser credit requests, and code to affect obtaining preferred credit offers.

Also, the present system is an apparatus, comprising a memory having at least one region for storing executable program code, and a processor for executing the program code

stored in the memory. The program code, further comprises code to affect a credit transaction, and, code to affect ad compensation.

Also, the present system is an apparatus, comprising

5 a memory having at least one region for storing executable program code, and a processor for executing the program code stored in the memory. The program code, further comprises code to affect delivery verification payment.

Also, the present system is an apparatus, comprising

10 a memory having at least one region for storing executable program code, and a processor for executing the program code stored in the memory. The program code, further comprises code to affect advertising targeting.

Also, the present system is an apparatus, comprising

15 a memory having at least one region for storing executable program code, and a processor for executing the program code stored in the memory. The program code, further comprises code to affect provision of ads, and code to store ads in a database.

20   Also, the present system is an apparatus, comprising a memory having at least one region for storing executable program code, and a processor for executing the program code

stored in the memory. The program code, further comprises code to affect provision of accesser availability information, and code to store accesser availability information in a database.

5   Also, the present system is an apparatus, comprising a memory having at least one region for storing executable program code, and a processor for executing the program code stored in the memory. The program code, further comprises code to affect provision of anonID information.

10   Also, the present system is an apparatus, comprising a memory having at least one region for storing executable program code, and a processor for executing the program code stored in the memory. The program code, further comprises code to affect the limitation of accesser identifying

15 information.

         Also, the present system is an apparatus, comprising a memory having at least one region for storing executable program code, and a processor for executing the program code stored in the memory. The program code, further comprises

20 code to affect provision of accesser information, code to affect obtaining accesser information, code to affect

provision of accesser credit rating, and code to affect

accesser credit rating.

Also, the present system is an apparatus, comprising

a memory having at least one region for storing executable

5   program code, and a processor for executing the program code

stored in the memory. The program code, further comprises

code to affect provision of credit requests, code to affect

provision of accesser credit rating, and code to affect

provision of accesser credit issuance.

10   Also, the present system is an apparatus, comprising

a memory having at least one region for storing executable

program code, and a processor for executing the program code

stored in the memory. The program code, further comprises

code to affect provision of accesser credit rating.

15   Also, the present system is an apparatus, comprising

a memory having at least one region for storing executable

program code, and a processor for executing the program code

stored in the memory. The program code, further comprises

code to affect provision of accesser anonID information.

20   Also, the present system is an apparatus comprising

a processor, storage, and a program stored in storage. The

program comprises a module to inspect an ID, a module to

obtain a 3rd party ID code from the ID, a module to identify an

ID type from the ID, a module to verify the fidelity of the

ID, a module to encrypt the 3rd party ID code into a non

repudiation ID, and a module to verify the non repudiation ID

5   is valid.

Also, the present system is an apparatus comprising

a processor, storage, and a program stored in storage. The

program comprises a module to provide a target system with a

dynamic adapter installer medium and affecting installer

10   execution, a module to obtain a desired bridge system type, a

module to select payment system bridge software compatible

with the desired bridge system, a module to select payment

system bridge compatible with the target system from the

selected payment system bridge software compatible with the

15   desired bridge system, and a module to install selected and

corresponding payment system bridge software compatible with

both the target system and the desired bridge system.

The above advantages and features are of

20   representative embodiments only, and are not exhaustive or

exclusive. They are presented only to assist in understanding

the invention. It should be understood that they are not

representative of all the inventions defined by the claims, to

be considered limitations on the invention as defined by the

claims, or limitations on equivalents to the claims. For

instance, some of these advantages may be mutually

5   contradictory, in that they cannot be simultaneously present

in a single embodiment. Similarly, some advantages are

applicable to one aspect of the invention, and inapplicable to

others. Furthermore, certain aspects of the claimed invention

have not been discussed herein. However, no inference should

10   be drawn regarding those discussed herein relative to those

not discussed herein other than for purposes of space and

reducing repetition. Thus, this summary of features and

advantages should not be considered dispositive in determining

equivalence. Additional features and advantages of the

15   contrivance will become apparent in the following description,

from the drawings, and from the claims.

BRIEF DESCRIPTION OF THE DRAWINGS

The accompanying drawings illustrate certain

embodiments of the invention.

20   Figure 1 illustrates a centralized controller

according to one embodiment of the present contrivance;

Figure 2 illustrates another embodiment of the present contrivance in the form of a distributed system interacting through a communications network;

Figure 3 illustrates another embodiment of the
5 system and various user system interactions;

Figure 4 illustrates web pages, hypertext, reference and proximal links;

Figure 5 illustrates web forms;

Figure 6 is a flowchart illustrating another
10 embodiment of the system and of various payment system interactions;

Figure 7 is a flowchart illustrating another embodiment of the system and of a credit transaction, provision(s), ad compensation, and delivery verification
15 payment;

Figure 8 is a flowchart illustrating another embodiment of the system and of advertising system interactions;

Figure 9 is a flowchart illustrating another
20 embodiment of the system and of an advertising targeting system;

Figure 10 is a flowchart illustrating another embodiment of the system and of an ad and target provision system;

Figure 11 is a flowchart illustrating another
5   embodiment of the system and of anonyfier interactions;

Figure 12 is a flowchart illustrating another embodiment of the system and of an anonyfication system;

Figure 13 is a flowchart illustrating another embodiment of the system and of a credit effect systemization;

10   Figure 14 is a flowchart illustrating another embodiment of the system and of a credit auction;

Figure 15 is a flowchart illustrating another embodiment of the system and of credit provision;

Figure 16 is a flowchart illustrating another
15   embodiment of the system and of instance profile provision and profile adaptive behavior;

Figure 17 is a flowchart illustrating another embodiment of the system and of various server systems interactions;

20   Figure 18 illustrates anonID web forms;

Figure 19 illustrates an overview of an embodiment of an identification key to non-repudiation converter;

Figure 20 further illustrates an overview of an embodiment of an identification key to non-repudiation converter;

Figure 21 illustrates an overview of one embodiment

5   of a closed loop payment system extra-loop resources enablement system;

Figure 22 Figure 22 illustrates an overview of one embodiment of a dynamic adapter;

Figure 23 illustrates an overview of an embodiment

10 of payment system interaction(s).

DETAILED DESCRIPTION

The present contrivance involves various actors and or resources. Generally, the actors take on two forms: accesser(s) 6601 of Figure 6 and provider(s) 6602 of Figure 6.

5 An accesser is typically a user that affects the access of a resource(s). A provider is typically an entity that affects the provision of a provision; e.g., creditor(s) 6604 of Figure 6 providing credit, advertiser(s) 6606 of Figure 6 providing ad(s), sellers providing goods and or services, and or the

10 like.

A typical resource is an information server controller 2201 of Figure 2. An information server module 2116 of Figure 2, 3317 of Figure 3 is executed on an information server controller. An information server

15 typically allows provider(s) to affect the provision of resource(s) to accesser(s).

CENTRALIZED CONTROLLER

Figure 1 illustrates one embodiment of a system incorporating the present contrivance.

20 In this embodiment, the system includes a centralized controller 1101, which may be connected to and or communicate with entities such as, but not limited to: one or

more users from user input device(s) 1111, e.g., receive

input; peripheral device(s) 1112; and or a communications

network 1113. The centralized controller may even be

connected to and or communicate with a cryptographic processor

5   device 1128.

A typical centralized controller 1101 may be based

on common computer systems that may comprise, but are not

limited to, components such as: a conventional computer

systemization 1102 connected to a storage device(s) 1114, and

10   or optionally a removable disc reader device 1126. The

storage device(s) may be a fixed hard disk drive, and or other

device(s) of the like. The removable disc reader device may

be a compact disc read only memory device (CD ROM), floppy

diskette drive, and or other device(s) of the like.

15   Conventional computer systemization(s) 1102 may

comprise a central processing unit (CPU) 1103, a read only

memory (ROM), a random access memory (RAM), and or an

interface bus 1107, and conventionally although not

necessarily, are all interconnected and or communicating

20   through a system bus 1104. Optionally, a cryptographic

processor 1126 may similarly be connected to the system bus.

Of course, any of the above components may be connected

directly to one another, connected to the CPU, and or

organized in numerous variations employed as exemplified by

conventional computer systems.

The CPU comprises at least one high-speed data

5   processor adequate to execute program modules for executing

user and or system-generated requests. Preferably, the CPU is

a conventional microprocessor such as the Intel Pentium

Processor and or the like. The CPU interacts with RAM, ROM,

and storage device(s) to execute stored program code according

10   to conventional data processing techniques.

Interface bus(ses) 1107 may accept, connect, and or

communicate to a number of interface adapters, conventionally

although not necessarily in the form of adapter cards, such as

but not limited to: input output interface(s) (I/O) 1108,

15   storage interface(s) 1109, network interface(s) 1110, and or

the like. Optionally, cryptographic processor interface(s)

1127 may similarly be connected to the interface bus. The

interface bus provides for the communication(s) of interface

adapter(s) with one another as well as with other component(s)

20   of the conventional computer systemization. Interface

adapters are adapted for a compatible interface bus.

Interface adapters conventionally connect to the interface bus

via a slot architecture. Conventional slot architectures may be employed, such as, but not limited to: AGP, Card Bus, ISA, EISA, MCA, NuBus, PCI, PCMCIA, and or the like.

Storage interface(s) 1109 may accept, communicate,
5 and or connect to a number of storage device(s) such as, but not limited to: storage device(s), removable disc reader device(s), and or the like. Storage interfaces may employ connection protocol(s) such as, but not limited to: (E)IDE, IEEE 1394, Fibre Channel, SCSI, USB, and or the like.
10 Network interface(s) 1110 may accept, communicate, and or connect to a communications network 1113. Network interface(s) may employ connection protocol(s) such as, but not limited to: direct connect, Ethernet (thick, thin, twisted pair 10/100/1000 Base T, and or the like), Token Ring,
15 wireless connection, and or the like. A communications network may be: the Internet; a local area network (LAN); a wide area network (WAN); a wireless network (e.g., employing protocols such as, but not limited to a wireless application protocol (WAP)); a secured custom connection; and or the like.
20 Input output interface(s) (I/O) 1108 may accept, communicate, and or connect to user input device(s) 1111, peripheral device(s) 1112, cryptographic processor device(s)

1128, and or the like. I/O may employ connection protocol(s) such as, but not limited to: ADB; audio: analog, digital, monaural, RCA, stereo, and or the like; infrared; joystick; keyboard; midi; optical; PC AT; PS/2; parallel; radio; serial;

5   video: BNC, composite, digital, RCA, S-Video, VGA, and or the like; wireless; and or the like.

User input device(s) 1111 may be card reader(s), dongle(s), finger print reader(s), glove(s), graphics pad(s), joystick(s), keyboard(s), mouse (mice), trackball(s),

10   trackpad(s), retina reader(s), and or the like.

Peripheral device(s) 1112 may be connected and or communicate with or to I/O and or with or to other facilities of the like (e.g., network interface(s), storage interfaces, and or the like). Peripheral device(s) may be camera(s),

15   dongle(s) (e.g., for copy protection, ensuring secure transactions as a digital signature, and or the like), external processor(s) (e.g., for added functionality), goggle(s), microphone(s), monitor(s), network interface(s), printer(s), scanner(s), storage device(s), visor(s), and or

20   the like.

Cryptographic unit(s) such as, but not limited to, microcontroller(s), processor(s) 1126, interface(s) 1127, and

or device(s) 1128 may be attached, and or communicate with the

centralized controller. A MC68HC16 microcontroller, commonly

manufactured by Motorola Inc., may be used for and or within

cryptographic unit(s). Equivalent microcontrollers and or

5   processors may also be used. The MC68HC16 microcontroller

utilizes a 16-bit multiply-and-accumulate instruction in the

16 MHz configuration and requires less than one second to

perform a 512-bit RSA private key operation. Cryptographic

units support the authentication of communications from

10   interacting agents, as well as allowing for anonymous

transactions. Cryptographic units may also be configured as

part of CPU. Other commercially available specialized

cryptographic processors include VLSI Technology's 33 MHz 6868

or Semaphore Communications' 40 MHz Roadrunner284.

15   The storage device(s) may contain a collection of

program and or database modules such as, but not limited to:

an operating system module 1115 (i.e., operating system); an

information server module 1116 (i.e., information server); a

user interface module 1117 (i.e., user interface); a web

20   browser module 1118 (i.e., web browser); database(s) 1119 such

as, but not limited to accesser database(s) 1119a, provider

database(s) 1119b, anonID database(s) 1119c, advertiser

database(s) 171719 of Figure 17, and or the like; a

cryptographic server module 1120 (i.e., cryptographic server);

an anonyfier server module 1121 (i.e., anonyfier); an

advertising server module 1122 (i.e., advertising server); a

5   delivery verification server module 1123 (i.e., delivery

verification server); a credit auction server module 1124

(i.e., credit auction); payment system server module 1125, and

or the like (i.e., a module collection). These modules may be

stored and accessed from the storage device(s) and or from

10   storage devices accessible through an interface bus. Although

these modules typically and preferably are stored in a local

storage device, they may also be stored in peripheral

device(s), RAM, remote storage facilities through a

communications network, ROM, and or the like.

15   The operating system 1115 is executable program code

facilitating the operation of a centralized controller. The

operating system facilitates access of I/O, network

interface(s), peripheral device(s), storage device(s), and or

the like. The operating system preferably is a conventional

20   product such as a Microsoft Windows NT Server and or Unix

operating system(s). Preferably, the operating system is

highly fault tolerant, scalable, and secure. An operating

system may communicate to and or with other modules in a
module collection, including itself, and or facilities of the
like. Conventionally, the operating system communicates with
other program module(s), user interface(s), and or the like;

5   e.g., it may communicate, generate, obtain, and or provide
program module, system, user, and or data communication(s),
request(s), and or response(s). The operating system, once
executed by the CPU, may interact with communication(s)
network(s), data, I/O, peripheral device(s), program

10 module(s), RAM, ROM, storage devices, user input devices, and
or the like. Preferably, the operating system provides
communication(s) protocol(s) that allow the centralized
controller to communicate with other entities through a
communications network. The preferred protocol is TCP/IP.

15 DISTRIBUTED SYSTEM INTERACTIONS

Figure 2 illustrates another embodiment of a system
incorporating the present contrivance. In this embodiment,
the centralized controller 1101 embodiment of Figure 1 has
been decentralized into components such as, but not limited

20 to: a information server controller 2201; user interface
controller 2202a and or alternatively a user interface device
2202b; a web browser controller 2203; database controller(s)

such as, but not limited to accesser database controller(s) 2204a, provider database controller(s) 2204b, anonID database controller(s), advertising database controllers (not pictured, but could similarly be provided employing advertising

5   database(s) 171719 of Figure 17), and or the like; a cryptographic controller 2205; an anonyfier controller 2206; an advertising controller 2207; a delivery verification controller 2208; a credit auction controller 2209; a payment system controller 2210; a removable disc reader device

10   controller; and or the like (i.e., decentralized server controllers). The aforementioned controllers of Figure 2 may be attached, interconnected, and or communicate through a communications network 2113 and or like facility.

An information server controller 2201 is comprised

15   similarly to the centralized controller of Figure 1 except it does not require an entire module collection other than an information server module, nor does it require a removable disc reader device. An information server module 2116 is stored program code that is executed by the CPU. Preferably,

20   the information server is a conventional Internet information server such as Microsoft's Internet Information Server revision 4.0. Preferably, the information server allows for

the execution of program modules through facilities such as

C++, Java, JavaScript, ActiveX, CGI scripts, ASP, any facility

with regular expression (regex) abilities (on the server

side), and or the like. Conventionally, an information server

5   provides results in the form of web pages to web browsers, and

allows for the manipulated generation of the web pages through

interaction with other program modules. An information server

may communicate to and or with other modules in a module

collection, including itself, and or facilities of the like.

10   Most frequently, the information server communicates with

operating system(s), other program module(s), user

interface(s), web browser(s), and or the like; e.g., it may

communicate, generate, obtain, and or provide program module,

system, user, and or data communication(s), request(s), and or

15   response(s).

A user interface controller 2202a is comprised

similarly to the centralized controller of Figure 1 except it

does not require an entire module collection other than an

user interface module 2117, nor does it require a removable

20   disc reader device. A user interface is stored program code

that is executed by the CPU. Preferably, the user interface

is a conventional user interface as provided by, with, and or

atop operating systems and or operating environments such as

Apple Macintosh OS, Microsoft Windows (NT), Unix X Windows

(KDE, Gnome, and or the like), and or the like. Preferably,

the user interface allows for the execution, interaction,

5   manipulation, and or operation of program modules and or

system facilities through graphical facilities. The user

interface provides a facility through which users may affect,

interact, and or operate a computer system. An user interface

may communicate to and or with other modules in a module

10 collection, including itself, and or facilities of the like.

Most frequently, the user interface communicates with

operating system(s), other program module(s), and or the like;

e.g., it may communicate, generate, obtain, and or provide

program module, system, user, and or data communication(s),

15 request(s), and or response(s).

In alternative embodiments, a user interface device

2202 may take the place of and or be used in conjunction with

a user interface controller. The user interface device may be

a consumer electronics online access device (e.g., Phillips

20 Inc.'s WebTV), PDA, telephone, and or the like.

A web browser controller 2203 is comprised similarly

to the centralized controller of Figure 1 except it does not

require an entire module collection other than web browser

module 2118, nor does it require a removable disc reader

device. A web browser is stored program code that is executed

by the CPU. Preferably, the web browser is a conventional

5   hypertext viewing application such as Microsoft Internet

Explorer or Netscape Navigator. Preferably, the web browser

allows for the execution of program modules through facilities

such as Java, JavaScript (preferably revision 1.2 or greater),

ActiveX, any facility with regular expression (regex)

10   abilities, and or the like. A web browser may communicate to

and or with other modules in a module collection, including

itself, and or facilities of the like. Most frequently, the

web browser communicates with information server(s), operating

system(s), integrated program module(s) (e.g., plug-ins), and

15   or the like; e.g., it may communicate, generate, obtain, and

or provide program module, system, user, and or data

communication(s), request(s), and or response(s).

A database controller 2204 is comprised similarly to

the centralized controller of Figure 1 except it does not

20   require an entire module collection other than database

module(s) 2119, nor does it require a removable disc reader

device. A database is stored program code that is executed by

the CPU and it is stored data processed by the CPU. Preferably, the database is a conventional, fault tolerant, relational, scalable, secure database such as Oracle or Sybase. A database may communicate to and or with other

5   modules in a module collection, including itself, and or facilities of the like. Most frequently, the database communicates with information server(s), operating system(s), other program module(s), and or the like; e.g., it may communicate, generate, obtain, and or provide program module,

10   system, user, and or data communication(s), request(s), and or response(s).

Databases may be consolidated and or distributed in countless variations through standard data processing techniques. Portions of database(s), e.g., tables, may be

15   exported and or imported and thus decentralized and or integrated. An accesser database controller 2204a is a specialized controller designed to facilitate accesser related transactions. The accesser database controller employs an accesser database module 2119a. Of course, employing standard

20   data processing techniques, one may further distribute the accesser database over several conventional computer systemizations and or storage devices. Similarly,

configurations of a provider database controller 2204b, and or

a anonID database controller 2204c may be varied by

consolidating and or distributing a provider database module

2119b and or anonID database module 2119c. A provider

5   database facilitates provider related transactions. Another

variant of a provider database is an advertising database

module 171719 of Figure 17. An anonID database facilitates

anonymous transactions.

A cryptographic sever controller 2205 is comprised

10   similarly to the centralized controller of Figure 1 except it

does not require an entire module collection other than

cryptographic server module 2120, nor does it require a

removable disc reader device. A cryptographic server module

is stored program code that is executed by the CPU 1103 of

15   Figure 1, cryptographic processor 1126 of Figure 1,

cryptographic processor interface 1127 of Figure 1,

cryptographic processor device 1128 of Figure 1, and or the

like. Preferably, cryptographic processor interface(s) will

allow for expedition of encryption and or decryption requests

20   by the cryptographic server, however, the cryptographic server

may run on a conventional CPU. Preferably, the cryptographic

server allows for the encryption and or decryption of provided

data. Preferably, the cryptographic server allows for both

symmetric and asymmetric (e.g., Pretty Good Protection (PGP))

encryption and or decryption. Preferably, the cryptographic

server allows conventional cryptographic techniques such as,

5   but not limited to: digital certificates (e.g., X.509

authentication framework), digital signatures, dual

signatures, enveloping, public key management, and or the

like. Preferably, the cryptographic server will employ

numerous encryption and or decryption protocols such as, but

10   not limited to: Data Encryption Standard (DES), Elliptical

Curve Encryption (ECC), International Data Encryption

Algorithm (IDEA), MD5, RC5 (Rivest Cipher), RSA (Rivest,

Shamir, and Adleman) Secure Hash Algorithm (SHA), and or the

like. A cryptographic server may communicate to and or with

15   other modules in a module collection, including itself, and or

facilities of the like. Most frequently, the cryptographic

server communicates with anonyfier server module(s),

information server(s), operating system(s), other program

module(s), and or the like; e.g., it may communicate,

20   generate, obtain, and or provide program module, system, user,

and or data communication(s), request(s), and or response(s).

A anonyfier server controller 2206 is comprised similarly to the centralized controller of Figure 1 except it does not require an entire module collection other than anonyfier server module(s) 2121, nor does it require a

5   removable disc reader device. An anonyfier server module is stored program code that is executed by the CPU. The anonyfier server masks the identity from accesser(s)' accesses and or transaction(s) with an information server and or computer system while maintaining transaction data.

10   Preferably the anonyfier employs a cryptographic server to encrypt and decrypt accesser identity. The anonyfier server may store anonyfied information in an anonID database 2119c. An anonyfier may communicate to and or with other modules in a module collection, including itself, and or facilities of the

15   like. Most frequently, the anonyfier communicates with cryptographic server(s), database(s), information server(s), operating system(s), other program module(s), and or the like; e.g., it may communicate, generate, obtain, and or provide program module, system, user, and or data communication(s),

20   request(s), and or response(s).

A advertising server controller 2207 is comprised similarly to the centralized controller of Figure 1 except it

does not require an entire module collection other than

advertising server module(s) 2122, nor does it require a

removable disc reader device. An advertising server module is

stored program code that is executed by the CPU. The

5   advertising server affects obtaining and the provision of ads

from advertiser(s) to accesser(s). Preferably, although not

necessarily, the advertising server employs the services of an

anonyfier for targeting accesser(s) without revealing

identity. An advertising server may communicate to and or

10   with other modules in a module collection, including itself,

and or facilities of the like. Most frequently, the

advertising server communicates with anonyfier(s),

database(s), information server(s), operating system(s), other

program module(s), and or the like; e.g., it may communicate,

15   generate, obtain, and or provide program module, system, user,

and or data communication(s), request(s), and or response(s).

A delivery verification server controller 2208 is

comprised similarly to the centralized controller of Figure 1

except it does not require an entire module collection other

20   than delivery verification server module(s) 2123, nor does it

require a removable disc reader device. A delivery

verification server module is stored program code that is

executed by the CPU. The delivery verification server affects obtaining and the provision of provision(s) delivery, typically although not necessarily, for payment system(s). A delivery verification server may communicate to and or with

5   other modules in a module collection, including itself, and or facilities of the like. Most frequently, the delivery verification server communicates with anonyfier(s), database(s), information server(s), operating system(s), payment system server(s), other program module(s), and or the

10 like; e.g., it may communicate, generate, obtain, and or provide program module, system, user, and or data communication(s), request(s), and or response(s).

A credit auction server controller 2209 is comprised similarly to the centralized controller of Figure 1 except it

15 does not require an entire module collection other than credit auction server module(s) 2124, nor does it require a removable disc reader device. A credit auction server module is stored program code that is executed by the CPU. The credit auction affects obtaining and the provision of credit, typically

20 although not necessarily, from creditors through payment system(s) for accesser(s). A credit auction may communicate to and or with other modules in a module collection, including

itself, and or facilities of the like. Most frequently, the

credit auction server communicates with anonyfier(s),

database(s), information server(s), operating system(s),

payment system server(s), other program module(s), and or the

5   like; e.g., it may communicate, generate, obtain, and or

provide program module, system, user, and or data

communication(s), request(s), and or response(s).

A payment system server controller 2210 is comprised

similarly to the centralized controller of Figure 1 except it

10   does not require an entire module collection other than

payment server module(s) 2125, nor does it require a removable

disc reader device. A payment system server module is stored

program code that is executed by the CPU. The payment system

server affects obtaining and the provision of payment and or

15   credit, typically although not necessarily, from creditors

through payment system(s) for accesser(s). A payment system

server may communicate to and or with other modules in a

module collection, including itself, and or facilities of the

like. Most frequently, the payment system server communicates

20   with database(s), information server(s), operating system(s),

other program module(s), and or the like; e.g., it may

communicate, generate, obtain, and or provide program module,

system, user, and or data communication(s), request(s), and or response(s).

A removable disc reader device controller 2211 is comprised similarly to the centralized controller of Figure 1 except it does not require an entire module collection. A removable disc reader device controller allows for the provision of removable media. More particularly for security purposes, it allows for the provision of security cards to be read; e.g., Digicard. Specially adapted security cards may be placed into specially adapted removable media for reading by the disc reader device controller. Such a facility can provide heightened security for transactions over a communications network and or otherwise.

The functionality of any of the distributed server controller(s) may be combined, consolidated, and or distributed in any number of ways to facilitate development and or deployment. To accomplish recombining the functionality of the distributed server controller(s), one may simply copy the executable program module code from the module collection and or with other program modules, first ensuring the executable program module code has been compiled for the appropriate CPU of the controller for which it is destined,

and or data onto a local storage device of any of the various

controllers. Similarly, the module collection may be combined

in any number of ways to facilitate deployment and or

development. To accomplish this, one must simply integrate

5   the components into a common code base or in a facility that

can dynamically load the components on demand in an integrated

fashion.

The module collection may be consolidated and or .

distributed in countless variations through standard data

10   processing techniques. Multiple instances of any one of the

program modules in the program module collection may be

instantiated on a single controller, and or across numerous

controllers to improve performance through standard load

balancing data processing techniques. Furthermore, single

15   instances may also be distributed across multiple controllers

and or storage devices; e.g., database(s).

All program module instances and controllers work in

concert through standard data processing communication

techniques.

20   The preferable centralized and or distributed

controller configuration will depend on the context of system

deployment; i.e., factors such as, but not limited to, the

capacity and or location of the underlying hardware resources.

Regardless of if the configuration results in more

consolidated integrated program module(s), results in a more

distributed series of program modules, and or results in some

5   combination between a consolidated and or distributed

configuration, communication of data may be communicated,

obtained, and or provided. Instances of modules (from the

module collection) consolidated into a common code base from

the program module collection may communicate, obtain, and or

10   provide data. This may be accomplished through standard data

processing techniques such as, but not limited to: variable

passing, object instance variable communication, internal

messaging, shared memory space, and or the like.

If module collection components are discrete,

15   separate, and or external to one another, communicating,

obtaining, and or providing data with and or to other module

components may be accomplished through standard data

processing techniques such as, but not limited to: shared

file(s), process pipe(s), application program interface(s)

20   (API) information passage (i.e., inter application

communication), and or the like. Again, the preferable

embodiment will depend upon the context of system deployment.

VARIOUS USER SYSTEM INTERACTIONS

Figure 3 illustrates an overview of various user system(s) interaction(s). Information server(s) 3116 act as an in-between for electronic payment server module components

5 3125 and: user interface(s) 3117, user interface device(s) 3201, web browser(s) 3118, and or the like. Generally, the information server(s) take requests. The information server can make further requests of electronic payment server component(s) 3125. Electronic payment server components

10 comprise modules from the module collection and or the like, except it does not include a web browser module, user interface module, or information server module. Both the information server and electronic payment server components may service multiple instances of any of the user

15 interface(s), user interface device(s), and or web browsers; i.e., user interface component(s). However, it is preferable for the information server to act as a proxy for electronic payment server component(s) rather than them directly interfacing with user interface component(s). Also, there may

20 be one or more instances of the information server and or electronic payment server component(s) that may severally or jointly interact with one another.

Generally, electronic payment server components service information server(s), which in turn service user interface components. Figure 3 illustrates that components may be numerously instantiated and may service multiple and various components. For example a user interface 3117 may make numerous communications. In this example, the user interface 3117a makes two communications with an information server 3116a while also communicating with another information server 3116b; all while another instance of a user interface 3117b also communicates with the other information server 3116b. Similarly in another example, a user interface device 3201 may make numerous communications. In this example, the user interface device 3201a makes two communications, one with an information server 3116a, and a second with another information server 3116b; all while another instance of a user interface device 3201b also makes two communications, also one with an information server 3116a, and a second with the other information server 3116b. Similarly, the web browser 3118a communicates with an information server 3116a while another instance of a web browser 3118b also communicates another instance of the information server 3116b.

Similarly, information server module(s) 3116 and electronic payment server component(s) 3125 may make multiple communications and may be instantiated multiple times. For example electronic payment server component(s) 3125 may make

5   numerous communications. In this example, the electronic payment component(s) 3125a makes three communications with an information server 3116a, another information server 3116b, and with another instance of electronic payment server component(s) 3125b (also, the electronic payment server

10   component(s) 3125a may communicate with itself). Similarly, the electronic payment component(s) 3125b makes three communications with an information server 3116a, another information server 3116b, and with the first instance of electronic payment server component(s) 3125a (also, the

15   electronic payment server component(s) 3125b may communicate with itself).

WEB BROWSERS

        Figure 4 shows web browsers 4401 containing web pages 4402 with hypertext 4403 and reference links 4404 at

20   various navigation locations 4405. An originating navigation location 4405a references hypertext that may have initial

reference links 4404a. These initial reference links are proximal links to the originating navigation location.

One may view hypertext at an initial reference navigation location 4405b by traversing an initial reference

5   link. Conventionally, an accesser achieves link traversal by targeting a graphical pointing element (i.e., a cursor) 4408 on a video display peripheral device (i.e., a screen) atop the reference link within a web browser with a pointing device (i.e., mouse) and making a selection by engaging a button on

10   the mouse. Subsequent reference links 4404b found in the hypertext found at the initial reference navigation location 4405b are also proximal links, however, they are one reference less proximal (i.e., one "hop" away) to the originating navigation location.

15   One may view hypertext at a subsequent reference navigation location 4405c by traversing a subsequent reference link. The further subsequent reference links 4404c found in the hypertext found at the subsequent reference navigation location 4405c are also proximal links, however, they are two

20   references less proximal (i.e., two "hops" away) to the originating navigation location.

One may also navigate by engaging the forward 4407 and back 4406 buttons conventionally provided by web browsers. After having traversed the aforementioned links to a subsequent reference navigation location 4405c, an accesser

5 may traverse back to an initial reference navigation location 4405b by engaging the back button 4406. After having traversed to the initial reference navigation location 4405b, the accesser may traverse forward to a subsequent reference location by engaging the forward button 4407.

10 WEB FORMS

Figure 5 illustrates web forms. This illustration is for purposes of example only, and in no way should be considered a limited application and or implementation of the present contrivance. Web browsers 5401 display web pages 5402

15 containing hypertext 5403 and or web form elements such as but not limited to: text fields 5506, 5507, 5508, 5509, 5510, 5511; numerical fields 5503; hybrid (e.g., numerical and date) fields 5514; pop up menus 5501, 5502, 5512; pop up menu selection lists 5513; buttons 5504, 5515; and the like. A web

20 page with web form elements is a web form. A web form segment is a portion of a web form, which may be provided within a single html document at another location in that document

(e.g., by using html positioning techniques such as anchors ("#")), or it may be provided by another html document.

A web form is illustrated with an example order for jelly beans 5402, however, web forms may be employed for any number of uses. The accesser may enter information into web fields into a web form segment 5402a at a navigation location allowing for the selection of goods 5404a; e.g., selecting "Jelly Beans" in an item field 5501, selecting "Red" in a color field 5502, and providing a quantity "1000" in a quantity field 5503, and or the like. After having entered information into each of the web fields, the accesser may advance to the next web form segment by engaging a button 5504a or other facility of the like designed to advance the web browser to another web form segment by employing standard data processing techniques. Of course, innumerable web forms may be provided to an accesser by provider(s) with all kinds of field types specific to a transaction. Furthermore, providers may provide pricing information and many other types of information to an accesser before advancing to an accesser to the next web form segment 5402b at another navigation location 5404b. This web form segment contains updated price information 5505 with regard to the illustrated jelly bean

purchase. The accesser may then continue to the next form

segment at another navigation location 5404c by engaging a

next form button 5504b or like facility.

   In this web form segment, the accesser may enter

5 information into web fields into a web form segment 5402c at a

navigation location allowing for the selection of goods 5404c;

e.g., providing an accesser name "Jane Doe" into an accesser

name field 5506, providing an accesser address "123 Maple

Avenue" into an accesser address field 5507, providing an

10 accesser city "New York City" into an accesser city field

5508, providing an accesser state "New York" into an accesser

state field 5509, providing an accesser zip code "10001" into

an accesser zip code field 5510, providing an accesser country

"United States of America" into an accesser country field

15 5511, selecting "Credit Auction" in payment method field 5512

from a popup menu 5512 from a pop up list 5513, providing an

accesser payment information "1234 5678 9012 3456 12/01" into

an accesser payment information field 5514, and or the like.

Of course, an accesser may edit information provided in the

20 web form employing standard web form editing techniques.

   Typically, upon completing an order, the accesser

may engage a submit order button 5515, which typically

provides the relevant contents of the web form to a provider

for processing. Typically thereafter, an accesser will obtain

an approval, denial, confirmation of their order, and or the

like. However, in alternative embodiments, upon the

5   completing an order and or in lieu of providing information in

the customer information web form segment 5402c, an accesser

may submit anonID information (anonID information discussed in

Figures 11, 12, and 18) by engaging a submit anonID button

5516, and or like facility enabling the provision of anonID

10   information.

Forward 5407 and back 5406 buttons work similarly as

described in Figure 4 4407, 4406.

VARIOUS PAYMENT SYSTEM INTERACTIONS

Figure 6 illustrates various payment system

15   interaction(s). Typically an accesser 6601 wishing to engage

a provider 6602 in a transaction engagement 6603 in some way

accesses a provider and or provider facility. In the realm of

electronic commerce (i.e., E-Commerce), a provider may provide

an information server to facilitate such an exchange with an

20   accesser employing a web browser, but in the world of brick

and mortar a storefront may be provided to facilitate such an

exchange with an accesser employing a pair of Nikes. In other

words, there are innumerable ways for a transaction engagement to occur between an accesser and provider. Generally, a transaction engagement commences upon an accesser and provider coming to preliminary terms whereby there may be provision of

5   provision(s) by the provider to the accesser. Commonly, although not necessarily, the provision of provision(s) by the provider is in exchange for monetary consideration. A transaction becomes complete upon the accesser necessarily obtaining requested provision(s) and, optionally, although

10   typically, if it is a requirement of the provision, upon the provider obtaining an agreed upon monetary consideration.

In the realm of E-commerce, a transaction engagement typically, although not necessarily, may commence as described in the example of Figure 5. Typically after transaction

15   engagement commencement, a provision 6604 is provided to a delivery medium 6607 by the provider. A provision may be good(s), service(s), information, and or the like. A delivery medium obtains provision(s) and affects the provision of provision(s) to the accesser. Conventionally for goods, a

20   delivery medium may be courier services, postal services, and or the like. Conventionally for services, a delivery medium may be provider associate(s) engaged in the provision of

requested services, and or the like. Conventionally for

information, a delivery medium may be a communications

network, and or the like. The delivery of provisions may

occur in a serial and or concurrent fashion with regard to the

5   provision and obtaining of credit 6612 and or payment 6613.

Upon transaction engagement commencement, a provider

may make a credit and or approval request 6608 to charge an

accesser by engaging a payment system server 6609. A payment

system server may be a device, entity, and or the like.

10   Payment system servers vary in abilities and or attributes

depending upon the implementation; factors affecting

implementation such as, but not limited to entity backing,

providing, subsidizing, supporting its operation(s) and or

others of the like may affect ability and attributes of a

15   payment system. Some conventional payment system server

abilities are: pre-approval for specified monetary amounts for

an accesser without issuing credit, available credit for an

accesser, credit rating of an accesser, obtaining and or

providing credit for an accesser, obtaining and or providing

20   approval for credit for an accesser, and or the like. A

payment system server may be under the control of a creditor,

bank, financial institution, and or the like.

The payment system server may provide a creditor
with an offer to provide credit to an accesser, and or solicit
a creditor to provide an offer for credit for an accesser
6610. The payment system server may provide the creditor with
5 the accesser's credit rating and financial background. Upon
the creditor's obtaining a credit offer and or solicitation
for offers, the creditor may approve the provision of credit
and either provides that approval directly to the provider,
and or to the payment system server, which in turn may provide
10 approval information to the provider. Typically, upon the
provider's obtaining an approval code for the accesser
transaction, the provider will provide requested provisions
6604 to a delivery medium 6607 for delivery. Upon approval,
transaction engagement concludes.
15   Upon the approval of credit for the accesser, either
the payment system server and or the creditor may provide
credit 6612 to the accesser. The accesser will owe the
creditor a debt for facilitating the transaction. Typically
the creditor and or the payment system server may issue
20 invoices to the accesser for the debt and the accesser may
either provide the creditor with the required monetary
compensation either directly, and or through a payment system

server, which in turn would provide the creditor with the monetary compensation. Typically, the creditor would also provide the provider with payment on behalf of the accesser facilitating the transaction. This payment conventionally

5   occurs at some predetermined interval, typically thirty days. The provider may obtain this payment from the creditor via the payment system server.

Upon the transaction engagement conclusion, either a provider and or preferably an advertising server 6605 may

10   provide ad(s) 6618 to the accesser. Typically, upon transaction engagement conclusion the provider will provide an advertising server 6605 with accesser availability information 6619 and or accesser activity information 6620. The accesser activity and availability information may be obtained using

15   conventional computer web tracking techniques. Upon the advertising server obtaining accesser availability and or activity information from the provider, the advertising server will obtain a number of ad(s) targeted for the accesser. Typically, these ad(s) will be stored on an advertiser

20   database 171719 of Figure 17. Preferably, upon obtaining a determined number of ad(s) for the accesser, the advertising server will provide the ad(s) directly to the accesser.

However, the advertising server may provide the ad(s) to the provider and or any other entities wishing to use its targeting services for further provision to an accesser and or other entities of the like. Thus, upon transaction engagement commencement, the accesser will be provided with, typically, a web page of targeted ad(s) for viewing and or further navigation, traversal, and or the like.

Advertiser(s) 6606 may provide ad(s) to an advertising server for dissemination. The entity controlling the advertising sever maybe analogized to a provider. Further, the advertiser in this context may be analogized to an accesser. Typically, advertisers will pay to have their ad(s) 6618 disseminated by the advertising server. Viewer offer(s) 6621 and or solicitations to receive offer(s) may be made by either advertiser(s) and or the advertising server to one another. Viewer offer(s) represent accesser(s) either currently available, and or subsequently available for obtaining ad(s) dissemination. Advertising server(s) may provide advertiser(s) with viewer offer(s) and or solicit advertiser(s) for viewer offers. Viewer offer(s) may be made in batch prior to accesser availability and or on a real time basis. Viewer offer(s) may vary based on factors such as, but

not limited to viewer credit rating, provision selection,

statistical profiling, and or the like. Furthermore,

advertiser(s) and advertising server(s) may employ payment

systems with which to provide credit 6612 and payment 6613 for

5   the dissemination of ad(s). Typically, advertisers will

provide the advertising server with ad(s) 6618 for

dissemination. Typically, the advertising server will charge

advertisers for this dissemination service.

A delivery medium 6607 may provide delivery

10   verification information 6614 to a delivery verification

server 6615. In the case of services, courier services,

postal services, and or the like, tracking information may be

obtained from the service provider, i.e., delivery medium, via

electronic tracking systems, such as, but not limited to:

15   Federal Express web server tracking, UPS web server tracking,

United Postal Services web server tracking, and or the like.

In the case of information, delivery receipt information may

be provided by the accesser's system to the provider and

relayed to a creditor and or payment system server;

20   alternatively, copies of the delivery receipt information may

be provided directly to creditor(s) and or payment system

server(s). Delivery receipt information may be provided

employing standard information receipt techniques such as but not limited to: E-mail delivery and or read receipts, header and or traceroutes network verification, digital certificates, and or the like.

5   A provider may provide a payment system server and or creditor with tracking information provided by the delivery medium with regard to the provider's provision of provisions to the delivery medium. The payment system server and or creditor may then provide the provision tracking information

10   to the delivery verification server.

          The payment system server and or creditor may make delivery verification requests 6617 of the delivery verification server and or the delivery verification server may independently seek to obtain delivery verification from

15   the delivery medium after having obtained provision tracking information. Typically the delivery verification server will obtain delivery verification information from the delivery medium and provide delivery verification to either the payment system server and or creditor. Preferably, although not

20   necessarily, upon obtaining delivery verification, the payment system and or creditor may then release payment to the provider.

CREDIT TRANSACTION

Figure 7 illustrates a credit transaction 7701, provision 7703, ad compensation 7702, and payment delivery verification 7704.

5   A credit transaction 7701 may comprise transaction engagement 7705, transaction information provision 7706, approval provision 7707, approval 7708, and credit issuance 7709. A credit transaction may commence when an accesser affects the engagement of a provider for a transaction 7705.

10   This engagement process was illustrated for purposes of example, and not limitation, in Figure 5. Typically it includes the selection of provision(s), the provision of accesser information, and selection of a payment method if required. Accesser information may include any information

15   regarding the accesser such as, but not limited to name, address, biographical information, transactional information, and the like. Payment method selection(s) may include any supported methods of payment such as, but not limited to credit cards, wire, debit cards, credit auctions, and or the

20   like.

Upon transaction engagement 7705, transaction information may be provided to a payment system server 7706.

Transaction information preferably provided to a payment

system server may contain information such as, but not limited

to a credit and or payment request, and or the like.

Upon transaction information provision 7706, the

5   payment system server may affect the provision of credit

approval 7707. Accesser information may be accessed by a

payment system server from an accesser database and reviewed

for determination of credit approval. Conventional credit

approval techniques such as credit rating information, credit

10   limit, and factors of the like may be employed for approval

determination.

If accesser credit is not approved 7708, the payment

system server will deny credit to the accesser and not provide

approval to the provider. At that point, the provider may

15   reject the accesser, and the accesser may recommence

transaction engagement.

Alternatively, if accesser credit is approved 7708,

a creditor affects the issuance of credit to the accesser

7709. The payment system server may affect the issuance of

20   credit on behalf of the creditor and or the creditor may issue

credit directly to the accesser. Similarly, the payment

system server may affect payment to the provider on behalf of

the creditor and or the creditor may issue credit directly to

the provider. The payment system server may also provide the

provider with an approval or denial and or confirmation of the

credit request and or issuance.

5   Upon transaction engagement 7705, provision of

provision(s) may occur 7703. However, preferably, provision

of provision(s) will not occur until completion of the credit

transaction 7701. Provision of provision(s) may comprise

provision of provision(s) to a delivery medium 7710, provision

10 of tracking information, and delivery verification 7711. A

provider may affect the provision of provision(s) to a

delivery medium 7710. Upon provision of provisions 7710,

provision(s) tracking information may be provided by the

deliver medium to the provider 7711. Typically, in the case

15 of courier services and the like, a numerical code is provided

which may be used by payment system servers and or creditors

for purposes of tracking provision delivery on systems such as

but not limited to courier web tracking services and or the

like. Upon provision of provisions 7710, the delivery medium

20 may affect the provision of delivery verification information

7712. A delivery verification server 6615 of Figure 6 may be

configured to obtain the delivery verification information

verifying accesser receipt of provisions upon the delivery

verification server's obtaining a delivery verification

request from either a payment system server and or creditor.

The payment system server and or creditor may make a delivery

5   verification request of the delivery verification server

because a provider may provide the creditor and or payment

system server with accesser provision tracking information

provided by the delivery medium.

Upon the completion of a credit transaction 7701, ad

10   compensation 7702 may commence. Traditionally, merchants,

i.e., providers, must pay credit card companies and or credit

card company affiliates a charge for facilitating a

transaction initiated by a purchaser, i.e., accesser. Ad

compensation may be employed in lieu of and or as a compliment

15   to a provider charge by an electronic payment system. Thus,

the credit issuer(s) and or affiliates would receive

compensation from advertising revenue streams provided by the

ad compensation system. Ad compensation may comprise an

advertising server obtaining accesser activity and or

20   availability information 7713, typically, from a provider.

Upon obtaining accesser information 7713, the

advertising server affects obtaining accesser information

7714. Typically, the advertising server may access an

accesser database kept by an informant 8801 of Figure 8. The

accesser database may maintain any accesser information,

transactional, identifying, biographical, and or the like.

5   The advertising server may employ accesser availability and or

activity information 7713 to query the accesser data and

obtain full accesser information. Further, the advertising

server may provide accesser availability and activity

information to the accesser database.

10   Upon having obtained full accesser information 7714,

the advertising server may affect the provision of ad(s) 7715,

typically for the accesser. The advertising server may employ

numerous heuristics for selecting ad(s) for the accesser;

e.g., see Figure 9. The advertising server may employ

15 conventional marketing heuristics. Preferably, the accesser

information is employed to better target ad(s) for the

accesser. An advertising database 171719 of Figure 17 may

house ad(s) for selection by the advertising server.

Employing a selection heuristic and basic data processing

20   retrieval techniques, ad(s) may be obtained from the

advertising database.

Upon the provision of ad(s) 7715, the accesser is presented with ad(s) 7716. Ad(s) may be provided to the accesser employing standard data processing web techniques such as, but not limited to: sending web page(s) containing

5   retrieved ad(s) in the form of web banner ad(s) to the accesser's web browser, and the like.

Upon the completion of a credit transaction 7701, delivery verification payment 7704 may commence. Traditionally, credit providing entities, e.g., credit card

10 companies and affiliates, provide merchants, i.e., providers, with payment after a predetermined period of time; i.e., typically a month later. Traditionally, credit providing entities charge providers a greater amount for facilitating a transaction by providing an accesser with credit when there is

15 no accesser signature tied to the transaction to compensate for the greater potential of fraudulent transactions. Delivery verification payment may be used to release payment upon verification of provision of provision(s) to the accesser. Delivery verification payment may comprise

20 obtaining delivery verification information 7717, determination of delivery completion 7718, and affecting payment release 7719.

Upon the completion of a credit transaction 7701, an entity requiring delivery verification affects obtaining delivery verification information 7717. Typically, the payment system server and or a creditor will make a delivery

5   verification request of a delivery verification server that may obtain delivery verification information from a delivery medium. Delivery verification information obtained will reflect if an accesser has obtained provisions provided by a provider. Delivery verification information may further

10 provide details such as but not limited to if an accesser signed for the provision(s), date and time of provision receipt, and or the like.

Upon obtaining delivery verification information 7717, if the delivery is not complete 7718, the requiring

15 entity may seek to obtain updated delivery verification information at any given time interval, or not at all. Alternatively, upon obtaining delivery verification information 7717, if the delivery is complete 7718, the requiring entity may affect payment release 7719, typically to

20 the provider. After payment provision, the provider may obtain payment.

VARIOUS ADVERTISING SYSTEM INTERACTIONS

Figure 8 illustrates various advertising system interactions. An advertising server 8605 acts as an in-between for: provider(s) 8602, accesser(s) 8601, and or informant(s). The accesser is a target of advertising by the advertising server. The advertising server may either provide ads directly to the accesser and or provide ads to be fed to the accesser through third parties such as but not limited to provider(s). The accesser is also the target of information harvesting by provider(s), the advertising server, and or informant(s).

Informant(s) are entities that collect data regarding accesser(s). Informant(s) collect accesser information employing standard data processing information collection techniques to record identity, transactional history, biographic history, geographic history, and the like. Informant(s) record accesser information in accesser database(s). Advertising server(s) and or provider(s) may employ similar techniques to record accesser information. Informant(s) may be employed by accesser(s), advertising server(s), provider(s). Informant(s) may be queried and provide accesser information to a requesting entity. Preferably, the advertising server will query the informant to

obtain accesser information. Informants may gather

information about accessers from accessers, providers,

advertising servers, and the like. The advertising server may

employ obtained accesser information for purposes of targeting

5   ad(s) for an accesser.

ADVERTISING TARGETING SYSTEM

Figure 9 illustrates an advertising targeting

system. An advertising targeting system may be employed as

part of an ad compensation system 7702 of Figure 7.

10   Particularly, the advertising targeting system of Figure 9 may

be employed when an advertising server affects the provision

of ads 7715 of Figure 7, 9715.

Upon completion of a credit transaction 7701 of

Figure 7, 9701, advertiser(s) may be provided with target(s)

15   9901. Advertiser(s) information may be maintained, along with

advertiser ad(s), in and advertising database 171719 of Figure

17. The target is based on accesser availability information

obtained from an advertising server 7713 of Figure 7.

Upon target provision 9901, ad(s) may be provided

20   based on the target and or provider 9703. Provision of ad(s)

may be accomplished similar to other provisions 7703 of Figure

7. Ad determination and or selection may be based on numerous

heuristics such as but not limited to: target desirability, random, frequency, location, provider provision conflict avoidance, last purchase relatedness, and or the like.

Target desirability may be determined employing
5 numerous heuristics. Target desirability may be determined employing standard credit rating techniques employing factors such as but not limited to credit history, credit availability, current credit extension, and or the like. Target desirability may be expressed and or embodied in a
10 ranking and or rating. Integrating factors such as purchasing propensity profile information, and or the last provision obtained (i.e., purchased) may further enhance this target desirability ranking. Employing standard statistical techniques such as frequency, correlations, and or like
15 analysis a target desirability ranking may be provided for any and all accessers. Having target desirability rankings allows the advertising server to select ads from advertisers wishing to pay more or less for particular desirability rankings.

Of course, ads may be selected simply at random, at
20 specified provider locations, and or with specified (i.e., paid for) frequencies.

Alternatively, a provider provision conflict ad selection heuristic may be employed. Upon completion of a credit transaction 7701 of Figure 7, a provider supplying an accesser (i.e., sponsoring) for ad targeting may prefer to
5   have ads for provisions (i.e., products, services, information, et al.) from third parties that do not compete with the provider's offerings. An advertising system server may prevent the selection of ads from an advertising database that conflict with offerings from a sponsoring provider. This
10 conflict check may be accomplished employing standard data processing techniques such as but not limited to: string, compare, concatenate, sort techniques, and the like. An advertising server may query a provider database and obtain offerings, query an advertising database of advertisers, and
15 not select ads with competing offerings. Alternatively, sponsoring providers may provide specific advertiser(s) and or advertisements they do not wish to sponsor; this banned list of ads and advertisers may be saved in their record in the provider database and used by the advertising system server to
20 prevent the selection of banned ads.

Alternatively, based on the last purchases of the accesser, the advertising system server may select ads.

Employing accesser information about prior purchases, and or

the latest purchase, the advertising system may select ads to

complement the prior purchases. The selection of relatedness

may be accomplished by establishing a database of pairings of

5   items and relatedness rankings. For example, if an accesser

just bought a car online, the advertising system server might

select car insurance ads for accesser provision.

Furthermore, any and all the above heuristics may be

combined in various manners. Each heuristic may affect an

10   accesser's desirability ranking to advertisers. For example,

an accesser that just bought a car with a high credit rating

may be selected to receive numerous ads from an insurance

company even though ads existed in the advertising system

server for floor mats because the provider of the car banned

15   floor mat ads from its site.

Upon the determination of ads employing any of the

above selection heuristics and or the like, the advertising

server affects the provision of the selected ads for the

accesser 7715 of Figure 7, and then the accesser is presented

20   with the adds 7716 of Figure 7.

Upon the provision of ads 9703, advertisers may be

charged 9709; similarly to how creditors may affect the

issuance of credit 7709 of Figure 7 to accessers (i.e., in

this case the advertisers are accessers) by employing a

payment system server if so desired. Of course, advertisers

may pre-pay for ad dissemination as well. Furthermore,

5   advertiser's may be charged nothing for ad provision; if an ad

provision has no associated charge, no advertiser charges will

be affected. Similarly to other provisions, ads may also

employ delivery verification payment 7704 of Figure 7, 9704

for payment release of charges.

10   An example transaction from one alternative

embodiment of the system would allow: provider's systems to

totally customize the presentation of web pages for accessers

before serving them to accessers based on criteria maintained

in a database tracking said criteria. The tracked criteria

15 may be information such as, but not limited to: demographics,

socioeconomics, sex, age (which may also be determined by his

or her social security number),the accesser's virtual

inventory determined by previous purchases, previous ad

effectiveness measurements, previously viewed materials from

20 other wed sites, linked accounts to other people, and or the

like.

Further illustrating the example transaction from
one alternative embodiment a payment system server record may
indicate that a virtual inventory for Jane Doe to be: Jane
Doe's identity is anonyfied to record #182367287, her age is
5   55, and she is from Aspen Colorado; her virtual inventory
might comprise: skis, back massager from an online retailer
Sharper Image, payment for her husband's cardiologist,
mortgage for new house, new computer from online retailer
Dell, procurement of direct deposits of $20.00 a month.
10   Further illustrating the example transaction from
one alternative embodiment of a payment system server record
may indicate that a previous virtual inventory for Jane Doe to
show: a like of travel magazines about the South Pacific.
        Further illustrating the example transaction from
15 one alternative embodiment of a payment system server record
may indicate that a previous ad effectiveness measurement for
Jane Doe to be: a 98% chance of buying luxury goods when on
sale.
        Further illustrating the example transaction from
20 one alternative embodiment of a payment system server
transaction, a transaction might be: Jane Doe logs onto an
online store on the Internet. The providers web site detects

that the customer is a payment system server customer. Before

providing the web page to the accesser, the web site pre-

constructs and then provides the web pages. Then Jane Doe

views the first web page.

5   Further illustrating the example transaction from

one alternative embodiment of a payment system server

transaction, a web page profile target result might be: a Web

Page with a banner ads reading: "US air tickets to the Islands

50% off;" "Welcome to the worlds largest store that

10 specializes in luxury goods for less," "See our site for

decorating your new house with a Rocky Mountain Flare," "New

improved back massager with heating element to reduce aches

and pains only $19.99," "Vuiton luggage set - buy now and pay

no interest for one year," and "News Content: NY Times reports

15 new drug for men with heart problems."

AD AND TARGET PROVISION SYSTEM

          Figure 10 illustrates an ad and target provision

system. Advertisers may require a facility with which to

provide ads to an advertising server. Furthermore, an

20 advertising server may require a facility with which to obtain

and or collect information for targeting accesser(s).

Advertiser(s) may affect the provision of ad(s) and

information 10705. In essence, here an advertiser becomes an

accesser and engages in a transaction 7705 of Figure 7, 10705

with the entity controlling the advertising system server who

in this case becomes a provider of advertising services. The

5   advertiser may commence transaction engagement in a manner

similar to that shown in Figure 5, except the advertiser will

provide ads for placement in the web form employing standard

data processing techniques such as but not limited to

javascript applets for uploading of data from an accesser web

10   browser, and or the like. Upon the provision of advertiser

ad(s) and information 10705, the advertising system server

affects the storage of advertiser ad(s) and information in an

advertiser database 101003. At this point, the advertisers

themselves, who are currently acting like an accesser, may

15   optionally become the targets of an ad compensation system

7704 of Figure 7, 10702.

Asynchronously, to the aforementioned ad provision

system 10705, 101003, targeting information provision may

occur 101001, 101002. An informant may provide accesser

20   activity and or availability information 101001. Upon the

provision of activity and or availability information 101001,

the advertising server, or other information tracking entity

such as another informant, may affect the storage of accesser

activity and or availability information in an accesser

database 101002. At this point, the informants may optionally

become the targets of an ad compensation system 7704 of Figure

5   7, 10702.

Figure 11 illustrates various anonyfier

interactions. An anonyfier server 111101 may separate

accesser identity information from accesser transaction

information. Furthermore, the anonyfier may securely protect

10   and or prevent information requesting entities 111102 from

obtaining and or realizing the identity of an accesser 11601

while still providing the information requesting entity with

determined and or limited accesser transactional information;

e.g., see Figure 18.

15   Employing conventional cryptographic techniques, an

accesser may identify itself to an anonyfier. For example, in

one embodiment, an anonyfier may identify an accesser by

verifying a digital certificate 111103b provided by the

accesser. Thus, an accesser of an information requesting

20   entity may provide the information requesting entity with an

encrypted digital certificate 111103a, which the information

requesting entity may relay to the anonyfier server along with

its own digital certificate 111103c. Conversely, the information requesting entity may provide the accesser with an encrypted digital certificate 111103a, which the accesser may relay to the anonyfier server along with its own digital

5   certificate 1103b. The anonyfier server may then verify accesser and or information requesting entity identity and provide the information requesting entity with determined and or limited accesser transactional information without accesser identification information. Thus, for example, an accesser

10   visiting a merchant and engaging in a transaction for jelly beans (i.e., continuing the example in Figure 5), may limit identifying information disclosure; e.g., Figure 18.

WEB FORMS

Figure 18 illustrates anonID web forms. This

15   illustration is for purposes of example only, and in no way should be considered a limited application and or implementation of the present contrivance. The transaction engagement commenced in Figure 5 may be concluded with the provision of anonyfied accesser information by providing the

20   provider of Figure 5 with information released by an accesser controlling anonyfier server disclosure via an anonID web form 18402. The accesser may traverse to the anonID web form upon

having engaged a submit anonID button 5516 of Figure 5. In
the anonID web form the accesser may select information to
keep anonymous by engaging check boxes 181801 and or any like
facility with a cursor 18408.

5   An anonID web form may contain information fields
containing and or representing identifying information such
as, but not limited to accesser: name 18506, social security
number 181816, address 18507, zip code 18510, medical history
181813, and or the like. An anonID web form may also contain
10 information fields containing and or representing non-
identifying information such as, but not limited to accesser:
city 18508, state 18509, country 18511, credit rating 181804
(typically a numeric value), credit transactions 181806, web
site visit locations 181807, buying habits 181808, income
15 181809, liabilities 181810, assets 181811, net worth 181812,
overall transaction rating 181814, and or the like.

       All of the information fields may have an associated
current rating 181802. Engaging or disengaging anonyfication
181801 of information fields will affect the current rating.
20 For example, by not providing her name, Jane Doe may incur a
five point rating for that field because creditors and
providers are wearier about engaging in a transaction with an

anonymous entity. Had Jane not anonyfied her name 18506,

181801, her score current rating score may have been zero for

her name 1802, 18506 if her name had a good reputation rating

with the jelly bean provider; or her current rating may have

5   been ten if she had a bad reputation rating with the jelly

bean provider. Thus, Jane Doe, i.e., the accesser, may

improve or worse her overall rating for the jelly bean

transaction 181814, 181802 by selecting what information to

keep anonymous 181801. In this example, a lower overall

10   numeric score 181814, 181802 would result in a better overall

accesser credit rating; however, many other ranking and rating

systems may be employed. An anonyfier server, and or a

payment system with anonyfication facility may also provide

the accesser with suggestions to improve ratings 181803.

15   In the example web form for Jane Doe, Jane has

chosen to not provide the jelly bean provider with her name,

18506, 181801, her social security number 181816, 181801, her

accesser credit account 181805, 181801, her accesser credit

transactions 181806, 181801, her accesser liabilities 181810,

20   181801, her accesser net worth 181812, 181801, nor her

accesser medical history 181813. This yields a transaction

rating of thirty for Jane Doe 181814, 181802. The accesser

may affect the provision of information limited by her

disclosure selections 181801 and or transaction rating 181814,

181802 to creditors, payment system servers, and or providers

by engaging a button to submit anonID information 181815.

5   Based on the transaction rating, a payment system server,

creditor, and or provider may decide to approve a transaction

and commence transaction engagement.

SYSTEM AND OF ANONYFIER INTERACTIONS

In Figure 11, an accesser may affect the provision

10   of information limited by her disclosure selections 181801 of

Figure 18 and or transaction rating 181814, 181802 of Figure

18 to information requesting entities 111102 such as but not

limited to creditors, payment system servers, and or providers

by engaging a button to submit anonID information 181815 of

15   Figure 18.   In one preferred embodiment, the disclosure of

anonID information to an information requesting entity is

accomplished by: encrypting an accesser digital certificate,

an information requesting entity identifier (such as but not

limited to an IP address or digital certificate 111103a

20   obtained by the accesser from the information requesting

entity), accesser selections of information to keep anonymous

181801 of Figure 18, and any required accesser encryption

keys; all of which once encrypted is provided to an anonyfier

server; i.e., an accesser request to provide anonID

information 11104 to an information requesting entity. The

anonyfier server may decrypt this request to provide anonID

5   information to an information requesting entity 111105. The

anonyfier server may verify the legitimacy of the request by

verifying the accesser digital certificate. If the accesser

request is not legitimate, no information will be provided.

The anonyfier may then provide information selected for

10 disclosure 181801 of Figure 18 from an anonID database; the

anonyfier my have to employ an encryption key provided by the

accesser in the accesser request to provide anonID information

111104 to decrypt certain identifying information field in

conjunction with anonyfier keys. Before the anonyfier may

15 provide the anonID information with a transaction rating and

its own digital certificate all encrypted to the information

requesting entity, the anonyfier will verify the legitimacy of

the information requesting entity by requesting a digital

certificate 111103c from the information requesting entity and

20 comparing it to the digital certificate purportedly supplied

by the information requesting entity to the accesser 111103a

that was provided to the anonyfier in the accesser request to

provide anonID information 111104. If the identity

verification information provided to the anonyfier 111103a,

111103b, 111103c is not legitimate, no information will be

provided. Upon identity verification, anonID information is

5   encrypted with the anonyfier's and accesser's digital

certificates and provided to the information requesting entity

111105. The information requesting entity may then obtain the

encrypted anonID information, decrypt it, and make use of it.

Alternatively, rather than sending the encrypted

10   digital certificate to the information requesting entity for

relay to an anonyfier server, the accesser may have the

encrypted digital certificate provided directly to the

anonyfier server. Of course many alternative embodiments

exist employing conventional cryptographic techniques to

15   provide anonID information to an information requesting entity

and ensure identity through standard identity verification

techniques.

ANONYFICATION SYSTEM

Figure 12 illustrates an anonyfication system. An

20   accesser wishing to maintain anonymity and employing the

services of an anonyfier, said accesser may access a

communications network 121201. If the accesser navigates to

an entity not requesting information 121102, then the accesser

may continue to access and navigate a communications network

unfettered 121201. However, upon an accesser navigating to an

information requesting entity 121102, an anonyfier server may

5   protect the accesser's identity by affecting provision of

anonID information 121203, 121204. Upon an information

request 121102, an information requesting entity may obtain

anonID information from either an accesser 121203 and or an

information holding source 121204 such as but not limited to

10   an informant, an anonyfier server, payment system server with

anonyfier services, and or the like.

AnonID information is accesser information (i.e.,

any information related to an accesser) with no accesser

identifying information except a non-identity disclosing

15   identifier such as, but not limited to a digital certificate.

Identifying information is any information that may be

employed to particularly identify a particular individual

accesser; for example, a name, a social security number, or

even a street address may be used to identify a particular

20   individual while a salary, credit rating, or purchase

description (without more) will not particularly identify an

individual. Preferably the digital certificate is changed

from time to time. AnonID information provides the
information requesting entity accesser transactional
information while not violating and or exposing accesser
identity. This allows information requesting entities to make
5 queries for transactional information of an information
holding source with regard to the accesser, and or aggregates
of accesser, all without actualizing accesser identity.

All identifying accesser information is preferably
double key encrypted in an anonID database that may be
10 accessed by an anonyfier server. The anonyfier maintains only
one key and may not access or decrypt the identifying
information without the provision of the other encryption key
that may only be provided by the accesser on a per transaction
basis.

15 Furthermore, accessers may establish what types of
information is to be maintained anonymous and will require
their approval for disclosure for those wishing to gain
access; e.g., see Figure 18. These settings may be changed on
a per transaction basis employing web form check boxes, and or
20 other facilities of the like; e.g., see Figure 18.

CREDIT EFFECT SYSTEMIZATION

Figure 13 illustrates a credit effect systemization

131301. A credit effect systemization utilizer (CESU) such as

a provider, creditor, accesser, payment system server,

anonyfier, and or the like may employ a credit effect

5   systemization. Initially, an accesser may affect the

provision of accesser information 131302. Typically this may

be accomplished through web forms as exemplified in Figure 5

and or Figure 18. Upon provision of accesser information, the

CESU may affect the obtaining of accesser information 131303.

10   Upon obtaining accesser information, the CESU may affect the

provision of a rating based on accesser information 131304.

Accesser credit ratings may be based on numerous heuristics

such as but not limited to: target desirability, random,

frequency, location, provider provision conflict avoidance,

15   last purchase relatedness, and or the like. This rating may

be provided employing heuristics similar to those discussed in

Figure 7 for ad compensation provision 7715 and or Figure 9

for the advertising targeting system 9715.

Upon provision of accesser ranking, an accesser may

20   elect to affect her ranking 131305. In one embodiment, an

accesser may elect to affect accesser ranking by opting to

access an anonID web form. The accesser may opt to access an

anonId web form by engaging a submit anonID button 5516 of

Figure 5. Upon election to affect accesser ranking 131305,

the CESU may affect and or allow improving accesser ranking

131306. In one preferred embodiment, the CESU accesser

5 ranking allowance and or effect 131306 is enabled by allowing

the accesser to keep certain accesser information anonymous

181801 of Figure 18.

In an alternative embodiment, the CESU may

automatically affect accesser rankings by employing various

10 heuristics, such as but not limited to ranking optimization,

anonymity optimization, combinations thereof, and or the like.

Upon CESU accesser ranking allowance and or effect

131306 or upon a negative election to affect accesser ranking

131305, the CESU may affect the provision of ranking, e.g.,

15 181814 of Figure 18, and or accesser determined information

181801 of Figure 18, 131307. Typically the provision of

accesser determined information and or ranking is provided to

CESU(s).

CREDIT AUCTION

20 Figure 14 illustrates a credit auction 141401. An

information server, accesser, payment system server,

anonyfier, and or the like may employ and or integrate a

credit auction.   Initially, an accesser may affect the

provision of accesser credit requests 141301.   In one

embodiment, the provision of an accesser credit request 141301

may allow the accesser to affect their credit rating similarly

5   and or through the credit effect systemization 131301 of

Figure 13.   Typically, the credit request may be facilitated

through a transaction engagement 6603 of Figure 6 through a

provider 6602 of Figure 6 to a payment system server 6609 of

Figure 6.

10   Upon accesser affecting a credit request 141301, a

credit auction utilizer may affect the provision of ranking

and or accesser determined information 14307.   A credit

auction utilizer (CAU) such as a provider, accesser, creditor,

payment system server, anonyfier, and or the like may employ a

15   credit auction.   The CAU may affect the provision of ranking

and or accesser determined information 14307 similarly to how

the CESU affects provision of ranking and or accesser

determined information 131307 of Figure 13; i.e., by employing

anonID web forms as discussed in Figure 18, and or the like.

20   Creditors may affect the provision of bids for

accesser credit request(s) and or portions of accesser credit

request(s) 141403.   Creditors may provide a credit auction and

or a payment system server with credit auction facility with

creditor information and availability of credit and or

conditions. For example, creditors may provide a credit

auction with the right to approve credit requests for

5 accesser's with credit ratings at a specified level, and with

apportioned blocks of credit; e.g., a creditor X may provide

$1 Million of credit for accessers with excellent credit

ratings in blocks of accesser capital not to exceed $5,000 per

accesser request at a 5.5% fixed annual lending rate. Thus if

10 an accesser is requesting $15,000 in credit, creditor X may

supply the first %5,000 in credit, assuming the 5.5% rate is

the lowest offered to the accesser, and subsequent offers from

other creditors may fulfill the remainder of the accesser

creditor request for $10,000. Bids by the creditors may be in

15 the form of offers and or provision of terms for credit

auction offers; i.e., credit auction provision of suitable

accesser credit requests. Conversely, credit auctions may

solicit creditors for offers based on available accesser

credit requests. Of course creditors may specify any number

20 of terms, conditions, requirements, provisions and or the like

when making credit bids available. In one embodiment, such

conditions may be set by employing standard data processing

techniques such as regular expressions working on XML based

web forms with rule sets based on creditor requirements. Some

non-limiting examples of heuristics factors that may be

employed by creditors were discussed in Figure 9; e.g., credit

5   rating, outstanding debt, and or the like.

A credit auction may affect obtaining preferred

credit offers and or preferred solicitations for offers

(PCO/PSO) until accesser request(s) fulfillment 141404.

PCO/PSOs are bids accepted based upon accesser requirements

10 and or preferences. For example, an accesser may specify that

she wishes to obtain $10,000 in credit employing anonID

information hiding her name, social security number, credit

history, et al. The accesser may not care if the credit is

provided by a single credit provider, but does want the

15 overall lending rate to be below 12.5% fixed. Based on the

accesser's preferences, creditor credit offers at 10% one year

variable rate credit offers would be turned down. Thus, only

credit offers matching accesser preferences will be employed

by the credit auction to fulfill the accesser credit request.

20 The credit auction may attempt to fulfill an accesser and or

creditor conditional offer for an indefinite or set period of

time. If the set period of time elapses with no credit

fulfillment, then a provider and accesser will not obtain

approval for the accesser credit request.

Upon accesser credit request fulfillment 141404, the

credit auction may affect the provision of credit issuance,

5 confirmation and or approval 141405. Typically, the credit

auction may affect a payment system server to issue credit

7709 of Figure 7. Similarly, the credit auction may affect a

payment system to provide credit request and or credit

issuance approval and or confirmation 6608 of Figure 6, 7708

10 of Figure 7.

In one preferred alternative embodiment, a payment

system server and or the credit auction server allows the

preapproval by way of scoring, rating, and or ranking of the

15 accesser (e.g., buyer requesting credit) before going into

auction. Once at the auction, a creditor can bid on credit

requests based on preapproval information. This allows the

accesser to anonymously show the seller he or she has the

ability to pay with out revealing their identity. Once a

20 transaction has occurred, the creditor may decrypt the

accesser's identity if the accesser allows it; however,

typically the accesser will have to allow for identity access for credit provisions.

CREDIT PROVISION SYSTEM

Figure 15 illustrates a credit provision system
5 151501. Typically a provider and or creditor will employ a credit provision system. Traditionally, providers would extend credit to accessers by having then apply for provider credit cards and or the like; e.g., a Macy's credit card. The credit provision system allows for any provider to extend
10 credit directly to an accesser as required at any time. An accesser may affect the provision of a credit request 151301, similarly and or through the credit effect systemization 131301 of Figure 13.

Upon accesser affecting a credit request 151301, a
15 payment system server may affect the provision of ranking and or accesser determined information 15307, similarly and or through the credit effect systemization 131307 of Figure 13.

Upon obtaining accesser ranking and or accesser determined information 151307, the provider may affect the
20 provision of credit issuance, confirmation, and or approval 151503. Typically, the provider may affect a payment system server to issue credit 7709 of Figure 7. Similarly, the

provider may affect a payment system to provide credit request

and or credit issuance approval and or confirmation 6608 of

Figure 6, 7708 of Figure 7. The primary difference, however,

being that the provider 6602 of Figure 6 will take the place

5   of the creditor 6611. Therefore, the provider will issue

credit to the accesser 6612 of Figure 6, and receive payment

from the accesser. Although, alternatively, the payment

system server may act as an intermediary between the accesser

and the provider.

10 PROFILE PROVISION AND PROFILE ADAPTIVE BEHAVIOR

Figure 16 illustrates an instance profile provision

161601 (IPP) and profile adaptive behavior (PAB) system

161604. The IPP/PAB allows a provider to tailor offerings to

individual and or groups of accesser(s). Initially, an

15 IPP/PAB system utilizer, typically an accesser, may affect

provision of accesser anonID information 161602 to a provider.

An IPP/PAB system utilizer (IPSU) such as a provider,

accesser, creditor, payment system server, anonyfier, and or

the like may employ an IPP/PAB system.

20   Upon provision of accesser anonID information

161602, a payment system server with anonyfying facilities may

affect the provision of accesser determined information and or

accesser credit rating information to a provider. Based upon

this accesser determined information and or rating

information, the provider may affect provision offerings and

or solicitations for provision offerings 161604. For example,

5   upon obtaining determined accesser and ranking information for

accesser Y, the provider may notice that accesser Y will buy

multiple bundled products when grouped together into a package

discount. The provider may configure his or her information

server to modify offerings and provide a custom package of

10   goods at a discount dynamically for accesser Y based on

accesser Y's profile.

VARIOUS SERVER SYSTEMS, INTERACTIONS

         Figure 17 illustrates an overview of an embodiment

of various server system(s) interaction(s). This embodiment

15   is for purposes of illustration only, and in no way should be

considered limiting. Information server(s) 17117 act as

gateway for various electronic payment server module

components 3125 of Figure 3. Electronic payment server module

components such as but not limited to advertising server

20   module(s), delivery verification server module(s) 17123,

payment server module(s) 17125, credit auction module(s)

17124, anonyfier server module(s) 17121, cryptographic

module(s) 17120, databases 17119, 171719, and or the like may

all interact with one another in various combinations

employing standard data processing techniques.

In one typical embodiment, a payment system server

5 may communicate with: an information server 17117 to allow

providers, and accessers access; a delivery verification

server module to provide a way to release funds to providers

upon an accesser's receipt of provisions; a credit auction

module to provide creditors, and accessers with a credit

10 market, and or an anonyfier server module to allow accesser's

to separate identity from transactional history. Also,

payment system server has access to databases 17119a, 1119b of

Figure 1, 17119c, 171719 either through direct connection or

through intermediary modules. A credit auction 17122 may

15 communicate with: an information server directly, or

preferably through a payment system server with creditors,

accessers, and or the like; a delivery verification server may

be employed to verify the electronic receipt of credits and or

payments; an anonyfier server module may be employed as well.

20 A delivery verification server may communicate with: an

information server for anyone wishing to obtain notice of

delivery verification information; a payment system server for

release of payment; an advertising server 17122 to verify

receipt of ad(s), and or advertiser payments; and an anonyfier

server to maintain accesser anonymity while still providing

provision receipt information. The advertising server may

5 communicate with: an information server to provide advertising

to accessers and or the like; a delivery verification server;

an advertiser database for maintaining advertiser information

and ad(s). An anonyfier server may communicate with: an

information server module, a credit auction, a payment system,

10 a deliver verification server, an advertising server, and a

cryptographic server 17120. The anonyfier server employs the

cryptographic server for processing cryptographic requests.

The anonyfier may also communicate with an accesser 17119a,

provider, and anonID database 17119c. In this particular

15 embodiment, the anonID database is a part of an accesser

database. Thus, the accesser database contains anonyfied

accesser identity information that may not be viewed without

both an anonyfier server key, and an accesser decryption key.

Any of the modules may access any number and or

20 types of databases either through direct controller

connection, e.g., Figures 1 and or 2, and or through other

controllers via a communications network.

NON-REPUDIATION CONVERTER

Figure 19 illustrates an overview of an embodiment of an identification key (ID) to non-repudiation converter (i.e., non repudiation converter).

5   An accesser may provide an identification key 191901. An ID may be any item uniquely identifying an individual such as, but not limited to a driver's license with magnetic strip, a credit card, a library card, and or the like. The uniquely identifiable matter embedded into the ID, is a 3rd party ID code. Upon obtaining a pre-existing ID, the non repudiation converter allows for selection of a validation technique 191902 to validate the ID 191903. The ID may be validated by automatically verifying the ID 191904, or manually verifying the ID 191915. Of course in alternative embodiments, establishments employing the non repudiation converter may opt to only employ automated verification or only manual verification.

Automatic verification of the ID 191904 includes inspecting the ID 191905, identifying the ID type 191906, and verifying the fidelity of the ID 191907. Upon obtaining the ID, an ID reader may be engaged 191908 upon the ID. A 3rd party ID code may be obtained by way of an ID reader device

such as, but not limited to card readers, disc readers, bar

code readers, optical scanners, and or the like depending on

the embodiment of the ID 191909; this may include a person

hand keying an ID attributes (e.g., card numbers) into a

5 computer system by way of a n input device (e.g., a keyboard).

Upon engaging an ID reader upon an ID, the information read by

the ID reader is scanned or parsed for a 3rd party ID code

191910. Typically, 3rd party ID codes have patterns

identifying their source of origin. Those skilled in the art

10 know the location of certain information codes embedded into

Ids that identify the ID type 191906. Parsing the information

employs standard data processing techniques such as string,

compare, concatenate, sort techniques, and the like.

Upon parsing the 3rd party ID code for attributes,

15 the parsed attributes are used as tokens for querying a

database of ID types 191911. If the attributes do not match a

known ID type 191912, then the ID 191901 may once again be

processed by the ID reader 191908. This rescanning may be

repeated as long as a loop limit 191926 is not breached. The

20 loop limit may be specified and may be infinite. If the loop

limit is breached, untrustworthy accesser procedures will be

engaged 191927. However, if the attributes of the parsed 3rd

party ID code do match a known ID type 191912 in an ID type

database 191911, then the 3rd party ID code's fidelity will be

verified 191907. Those skilled in the art know of the simple

checksums that may be performed on 3rd party ID codes that may

5   be used to verify the fidelity of the ID. Upon having

identified a known ID type in the ID type database,

verification attributes associated with the identified ID type

are retrieved from the database. These retrieved and known ID

type attributes are used as a basis to compare with the parsed

10 attributes 191913. If the known attributes do not match the

parsed attributes 191914, then the ID is not valid and may be

re scanned assuming a loop limit hasn't been breached 191926.

However, if the parsed attributes match those of known ID type

attributes in an ID type database, then the ID is valid and

15 the parsed 3rd party ID code may be passed for further

processing 191928.

Manual verification of the ID 191915 includes

identifying the ID type 191916, inspecting the ID 191917, and

verifying the fidelity of the ID 191918. Manual verification

20 differs primarily in that identification of ID type 191916 is

a manual task. Upon obtaining an ID, someone needs to examine

the ID 191919 and determine if it is an acceptable type

191920. Acceptable types are types that may be processed

either through an ID reader, or manual entry. If the ID is

not an acceptable type 191920, then a non repudiation

converter may accept other IDs 191926 until a loop limit

5   breach occurs 191926 or an acceptable form is identified.

Upon identifying an acceptable ID type 191920, inspection of

the ID 191917 and fidelity verification of the ID 191918 occur

similarly as for automated ID verification 191904.

10   Figure 20 further illustrates an overview of an

embodiment of an identification key (ID) to non-repudiation

converter (i.e., non repudiation converter). Upon validating

an ID 191903, 191928 of Figure 19, 201928, the non repudiation

converter will take the intangible 3rd party ID code and

15   convert it into a secure form to be used with a payment system

server 20609 as a non repudiation code. There is a direct

correlation between the converted ID code, and the original 3rd

party ID code. The 3rd party ID code at a minimum should be

encrypted 202002, 202004, 202007, 202009. The form of

20   encryption may be any of those mentioned in 2205 of Figure 2,

and elsewhere, as long as the proper and complementary

decryption scheme is used for any particular encryption

scheme. However, depending upon deployment resources, and the

requirements of any particular payment system, biometrics

202003 , transaction information 202005, personal

identification numbers 202008, and hashing 202011 may augment

5   the encryption to enhance security, if so desired.

Upon validating an ID 191903, 191928 of Figure 19,

201928, the non repudiation converter may obtain biometrics

202002 if the desired function is desired or required.

Biometric devices may include peripheral devices such as

10   finger print scanners, retina scanners, and or the like. If

biometric devices are present, biometrics may be obtained

202003, and used as a basis for converting the raw 3rd party ID

code. In an alternative embodiment, a biometric code derived

from the obtained biometrics may be used without a 3rd party ID

15   code, itself becoming the basis for identification to non

repudiation conversion. Upon obtaining the biometrics,

biometric software will return biometric information that may

be passed along with any 3rd party ID code for further

processing 202004. The biometric information returned from

20   the biometric has the property of being unique to the subject

upon which the biometric device was applied. Similarly, if no

biometrics are obtained 202002, the 3rd party ID code will be

passed for further processing 202004. If desired, transaction

information may be obtained 202004 for inclusion into

generating a non repudiation ID. If not, information, namely

a 3rd party ID code and or biometrics, will be passed for

5 further processing 202007. If desired, transaction

information will be obtained 202005. Transaction information

may include the date, time, point of sale (POS) number of a

merchant, and or the like. Such transaction information may

be obtained by merchants by way of credit card machines and or

10 the like. Including the merchant transaction information

would secure the non repudiation ID to a single merchant.

Thereafter, a personal identification number and or password

(PIN) may be obtained 202007. PINs may be obtained 202008 by

standard key entry peripheral devices such as a keyboard,

15 credit card terminal, and or the like. If no PIN is to be

obtained, then the 3rd party ID code plus any of the optional

non repudiation enhancing information (i.e., biometrics and or

transaction information) will be passed for encryption 202009.

If a PIN is provided, then the PIN will be provided along with

20 the 3rd party ID code plus any of the optional non repudiation

enhancing information. Any number of encryption algorithms

may be chosen, and a preferred algorithm choice will depend

upon deployment considerations such as national regulations

limiting encryption strength, hardware resources, and

complexity burden of operation minimization. Upon encrypting

the 3rd party ID code and any of the optional non repudiation

5   enhancing information, optional post encryption manipulations

may 202010 be applied. These optional post encryption

manipulations may themselves also be encryptions. Applying

hashing algorithms 202011 is desirable for increased security

purposes. However, if no hashing has is applied 202010, then

10   the encrypted 3rd party ID code and any of the optional non

repudiation enhancing information may be sent through a

communications network 20113 to a payment system server 20609

for verification. Similarly, even if the information is

hashed 202011, the non repudiation ID may be sent over the

15   communications network 20113 to the payment system server

20609.

The payment system server upon obtaining the non

repudiation ID may verify the validity of the non repudiation

device by employing standard cryptographic techniques. In one

20   example, the non repudiation ID may serve as a public key pair

complement that will be sent to the payment system server with

any payment information for unlocking. Upon obtaining the

public key variant of the non repudiation ID, the payment

server may decrypt the information and validate that the ID is

on record as being valid, and if so send back an authorizing

code to the merchant using the non repudiation converter. In

5   an alternative embodiment, the merchant and payment system

server have already agreed upon a key, and upon decryption the

payment system server will verify that the encrypted

information in the non repudiation converter ID is on file.

The payment server may decrypt this information employing

10 standard encryption techniques generally employing

complimentary decrypting algorithms, and or applying

decryption in the reverse processes as described thus far in

Figure 20. Upon successful decryption, the payment system

server may compare the 3rd party ID code (and if present any

15 PIN, transaction information, and or biometrics) with

information stored and available to the payment system server

to verify the non repudiation ID. If any of the information

does not match up to payment system server records, then any

subsequent transactions may be repudiated.

20   The payment system server (and or any ancillary

servers that may handle such functionality for the payment

system server; i.e., cryptographic controllers of Figure 2)

may obtain and create the original key and or non repudiation

ID code and or compliment by initially obtaining and or

performing the encryption described above in Figures 19 and 20

locally on site or from an accesser's system.

5   In one embodiment, the payment system server

operators may decide to employ drivers' licenses and PINs for

the creation of non repudiation IDs. An accesser would go to

a payment system server providing any requisite peripheral

devices to swipe or otherwise enter in a driver's license

10 number and then provide a PIN, both of which would be used as

the basis for creating a pair of encryption keys. The private

key would be saved on site at the payment system server.

Merchants using the payment system server would be able to

generate the public key pair compliment on demand by obtaining

15 the driver's license number and PIN at the merchant's site

through the use of a non repudiation converter.

          By employing a 3rd party ID, a payment system server

may avoid the costs of creating a tangible ID as is the norm.

Rather, by employing a non repudiation converter, the payment

20 system server instead creates a non tangible version of the

ID, namely the non repudiation ID, which is based off a

tangible 3rd party ID.

CLOSED LOOP INTO EXTRA-LOOP RESOURCES ENABLEMENT SYSTEM

Figure 21 illustrates an overview of one embodiment of a closed loop payment system extra-loop resources

5   enablement system (ELRES).

Creating a secured payment transaction system requires a technology model that interfaces to both closed loop systems 212103 and merchants 212105. One example of a closed loop system is a university campus card system; meaning

10   university systems do not support transactions that beyond the realm of the university. The present invention establishes a gateway that extends the realm of closed loop systems and merchants to beyond their traditional realms by establishing a platform that will interface with the a payment system server

15   21609 on one end (that may be interconnected with many other payment systems itself by way of a communications network, and or the like) and the merchants 212105 (that had no access to the closed loop and or other payment systems) on the other end. By adapting these limited systems to communicate and

20   interact with other payment systems, the present invention provides following capabilities in one embodiment:

the ability to identify the user's balance to
determine if the amount of funds available can be applied to
the products and services being ordered (i.e., on-line
verification of funds); the ability to enable the user to
5 proceed through checkout by paying for provisions through his
or her closed loop account (e.g., his or her university
account); the ability to record the details of the transaction
including payer, payee, data, time and amount of transaction;
the ability to execute the settlement transactions between the
10 closed loop system's bank and the merchant's bank; and the
ability to assist the closed loop system, merchant, and or
accesser in the reconciliation of settlement and transaction
recording.

A conventional closed loop payment system 212102 may
15 employ a database 21119 to track transactions limited to
accepting funds 212101 from an accesser 21601 for closed loop
related commerce 212103. In a typical closed loop system
there would be no link or communications between a closed loop
system 212102 and non affiliated (i.e., extra loop) systems
20 (e.g., payment system servers 21609 and merchants 212105). In
one embodiment, an ELRES employs a dynamic adapter 212104a
that is integrated into the payment system 212102 and thus

facilitating communications with a payment system server

21609. This allows the payment system server to act as a

gateway for other merchant's and payment systems to access the

funds and or credit 212101 originally limited to the closed

5   loop system (e.g., Internet web merchants 212105 and or others

of like). Other merchant systems tying and or communicating

with payment system servers may similarly and individually be

adapted 212104b. This expands the accesser's 21601 utility by

freeing the accesser to employ funds 212101 originally limited

10   to the closed loop system for other purposes (e.g., 212105)

through the payment system server 21609.

DYNAMIC ADAPTER

Figure 22 illustrates an overview of one embodiment

of a dynamic adapter. The dynamic adapter 212104 of Figure 21

15   is a self installable API that either merchants 212105 of

Figure 21 and or closed loop payment systems 21609 of Figure

21 may "plug & play" into their existing system (i.e., target

systems). Upon installation and configuration of the dynamic

adapter communications are established allowing the transfer

20   of funds and other payment system functions through standard

payment system electronic transfer techniques.

The dynamic adapter itself may be placed on a computer readable medium. Upon providing the computer readable medium containing the dynamic adapter and installer (i.e., installer medium) to either a closed loop payment

5   system and or merchants (i.e., target systems), the dynamic adapter installer may be executed either automatically through a self executing script or executable, or execution may be affected by the installing party 222201. Upon executing the installer, the dynamic adapter installer analyzes obtains the

10   identity of the desired bridge system (e.g., the payment system server 21609 of Figure 21). The installer may obtain this identity by allowing a user to select potential system types from a pop-up menu, typing in the name in a text box, and or other like facilities that may obtain a token for

15   searching 222202. Upon obtaining a token (e.g., string) representing the desired bridge system, the installer medium is searched for payment system bridge software compatible with the desired bridge system. The search may be accomplished by creating a table in which each payment system bridge software

20   package entry has a corresponding list of compatible desired bridge systems and or target systems. Thus using standard data processing search techniques, the table (and or any other

functionally equivalent data structures) may be searched for

the instances of the token. All corresponding payment system

bridge software will be selected on the basis of such a token

search 222203. Thereafter, the dynamic adapter installer

5 analyzes the system upon which it is executing (i.e., the

target system). The installer contains a list of known

payment and merchant systems and checks locations on the

target system for the existence of any of the listed systems.

For example, The Processing Network, Inc.'s SecureCharge;

10 Virtual Merchant, Inc.'s Virtual Merchant; and or TouchNet

Inc.'s E-commerce solution software all may be employed as

(Internet) payment system bridge software bases. By creating

a script that looks to see if particular isolated client

payment system components are installed , the appropriate

15 bridge software may be installed. Thus, the dynamic database

adapter installer will run through the list of all known

payment system bridge software, checking if the target system

has such components signifying compatibility with the selected

payment system bridge software 222203 thereby further

20 narrowing selection 222204. Only the appropriate payment

system bridge software is considered; namely payment system

bridge software that may communicate with the desired bridge

system 21609 of Figure 21. If the installer finds payment

system bridge software compatible with both the desired bridge

system, and with system software and or other payment system

client software residing on the target system 222206, then the

5   installer will initiate the installation of the appropriate

payment system bridge software package 2207. If, however, the

installer does not find payment system bridge software

compatible with either the target system or the desired bridge

system 222206, then an error will be reported and a custom

10   bridge will have to be developed 222208.

ALTERNATIVE EMBODIMENT OF PAYMENT SYSTEM INTERACTIONS

        Figure 23 illustrates an overview of an alternative

embodiment of payment system interaction(s). An accesser

23601 may employ a chip based smartcard 232302 to access the

15   various services provided by a payment system 232307. One

embodiment of a smartcard 232302 may contain any number of

electronic purses (i.e., E-purses). Examples of smartcards

include Gemplus, Inc.'s of France, GemXpresso Lite, SAM for

MPCOS-EMV, and GemProton cars. Smart cards may include a CPU

20   23103, ROM 23105, RAM 23106. Either the RAM or the ROM may

hold the smartcard's digital certificate 232305. These

smartcards control accesser funds, which may be released or

depleted upon transaction completion changing the value in

memory within the smartcard and or to smartcard linked

accounts reflecting the purchase. Smartcards may contain an

Operating System that supports a variety of security measures,

5 Bi-directional Authentication, DES or Public Key Encryption,

Elliptical Curve Algorithms, Anti-Tearing Flags, PIN/Passwords

and Internal Random Number Generation for unique Digital

Signatures, Session Journaling, and T=1 and T=0 protocols.

Smartcards employ transfer protocols known to those skilled in

10 the art.

Smartcards are like digital passports that carry

consumers' digital certificates. Smartcards are portable

secure keys that may be used between computer platforms and

merchants. They may transported to wherever they are needed.

15 Of course smartcard chips do not need to be in a physical

card, they may be embedded in other devices and mediums, e.g.,

cell phones, PDAs, and or the like.

The accesser may use the smartcard through a user

interface 232306; the user interface may be a user interface

20 module 2117 of Figure 2 and or a user interface device 2202b

of Figure 2. This may be accomplished through a peripheral

device for interfacing with smartcards disposed in

communication with the user interface and or through other ID

to non-repudiation conversion facilities as discussed in

Figure 19 and 20. This allows accessers to employ smartcards

on the Internet 232309 even if the smartcards were originally

5   designed to function only in conventional closed loop payment

systems, which is discussed in greater detail in Figures 21-

22. Similar to Figure 6, an accesser may access a provider

23602, 6602 of Figure 6 and or a creditor, e.g., a payment

system server bank partner, 23611 by way of user interface

10   232306. However, the accesser may also provide transaction

information directly to a payment system server 23609, which

may be necessarily the case in closed loop payment systems

adapted to act as a gateway as explained in Figures 21-22. An

accesser may use a digital certification service 232308 such

15   as, but not limited to an anonifier server 111101 of Figure 11

for security purposes of validating the identity of the

accesser and smartcard and associated accounts. The payment

system server 23609, digital certification 232308, and

creditor 23611 may all be disposed in communication with one

20   another to pass information relating to payment and ensuring

the validity of transactions. The accesser may then shop at

both affiliated and non-affiliated web sites.

People and or entities may shop with various types of websites in the Internet 232309 including affiliated and non-affiliated sites that were either modified to work with a payment system server 23609 or not. Shopping at an affiliated website 232318a that is configured to interoperate with a payment system server 232310 will be authenticated 232319a with a payment system server 23609. Shopping at an affiliate merchant whose system has not been modified to interoperate with a payment system server 232311 may also be accomplished by shopping and authenticating 232319b through a payment system server 23609, which may be accessed through a user interface by the accesser.

Shopping 232318b at a non-affiliated merchant with smartcard facilities 232312 may be accomplished through a provider's web site 23602 via a user interface 232306 by the accesser. The merchant 232312 can then authenticate and obtain approval 232320a by providing smartcard information through a communications network, e.g., the VISA network, which will obtain further authentication and or approval 232320d from a creditor 23611, e.g., a payment system server and or a partner bank. The creditor 23611 may then authenticate the accessers' digital certificate 232305 with

his digital certificate 232308 and or that of the payment system server. The creditor 23611 and the payment system server may then resolve payments and or approvals as already discussed throughout this disclosure.

Shopping 232318c at a non-affiliated merchant without smartcard facilities 232313 may be accomplished through a provider's web site 23602 via a user interface 232306 by the accesser. The merchant 232312 can then authenticate and obtain approval 232320b by providing smartcard information through a communications network, e.g., the VISA network, which will obtain further authentication and or approval 232320d from a creditor 23611, e.g., a payment system server and or a partner bank. The creditor 23611 may then authenticate the accessers' digital certificate 232305 with his digital certificate 232308 and or that of the payment system server. The creditor 23611 and the payment system server may then resolve payments and or approvals as already discussed throughout this disclosure.

Shopping at an affiliate merchant that is not online 232315, an accesser may make a purchase that is authenticated 232319c with a payment system server 23609, and may later be viewed with a user interface 232306. Similarly, an accesser

may shop at a non-affiliated offline merchant 232316, but

authentication is achieved through a communications network

23113a and further authentication 23230d occurs as already

discussed above with regard to creditors 23611, digital

5   certification 232308, payment system servers 23609 all of

which may share data 232307 between one another as already

discussed throughout the disclosure. Also ATM transactions

232317 may be authenticated 232321b through a communications

network, e.g., Cirrus Plus Network, and authentication occurs

10   similarly through a creditor 23611 as already discussed. Of

course, smartcards 232302 may be charged and or accessed

directly with a creditor 23611.

It should be understood that the above description

is only representative of illustrative embodiments. For the

15   convenience of the reader, the above descriptions have focused

on a representative sample of all possible embodiments, a

sample that teaches the principles of the contrivance. The

description has not attempted to exhaustively enumerate all

possible variations. That alternate embodiments may not have

20   been presented for a specific portion of the contrivance, or

that further undescribed alternate embodiments may be

available for a portion, is not to be considered a disclaimer

of those alternate embodiments. It will be appreciated that

many of those undescribed embodiments incorporate the same

principles of the invention and others are equivalent. Thus,

it is to be understood that the embodiments and variations

5   shown and described herein are merely illustrative of the

principles of this contrivance and that various modifications

may be implemented without departing from the scope and spirit

of the contrivance.